PHENYX PRO®

PTL-600/800 Series

Professional
Six-/Eight-Channel Audio Mixer

USER MANUAL

Benutzerhandbuch
Manuel de l'Utilisateur
Manuale d'uso
Manual del usuario
Manual do usuário

IMPORTANT SAFETY INSTRUCTIONS

1. Read and follow these instructions carefully.
2. Only use attachments, accessories, and spare parts specified by the manufacturer.
3. Avoid exposing the product and its connections to liquids and electrically conductive objects that are not essential for its operation.
4. Do not operate near any heat sources, such as open flames, radiators, or other apparatus that produce heat.
5. Keep the power cord safe by preventing it from being walked on or pinched, especially at the plugs.
6. Do not use the apparatus during lightning storms, and unplug it when unused for a long period of time.
7. Any modifications not approved by the manufacturer for the product could result in personal injury or product failure.
8. Operate this product within its proper operating temperature range.

Caution: This symbol indicates the unit might have a risk of electric shock.

Caution: This symbol is used to alert you to potential personal injury hazards. Obey all safety messages with this symbol to avoid possible injury or death.

Caution: This symbol indicates possible risk of electric shock within the unit.

Caution: This symbol means the product must not be discarded as household waste, and should be delivered to an appropriate collection facility for recycling. Proper disposal and recycling helps protect natural resources, human health and environment. For more information on disposal and recycling of this product, contact your local municipality, disposal service, or shop where you bought this product.

IMPORTANT PRODUCT INFORMATION

Licensing: A ministerial license may be required to operate this equipment in certain areas. Consult your national authority for possible requirements. Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment. Licensing of PHENYX PRO wireless microphone equipment is the user's responsibility, and licensability depends on the user's classification and application, and on the selected frequency. PHENYX PRO strongly urges the user to contact the appropriate telecommunications authority concerning proper licensing, and before choosing and ordering frequencies.

FCC Information

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.

*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 does not 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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

IC Statement

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(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.

The term "IC" before the certification/registration number only signifies that the Industry Canada technical specifications were met. This product meets the aplicable Industry Canada technical specifications.

Cet appareil contient des émetteurs/récepteurs exemptés de licence conformes aux RSS (RSS) d'Innovation, Sciences et Développement économique Canada. L'exploitation est autorisée 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 equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body
Cet équipement est conforme aux limites d' exposition aux rayonnements ISED établies pour un environnement non contrôlé.
Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps

Industry Canada ICES-003 Compliance Label: CAN ICES-3 (B)/NMB-3(B)

EU Directives

CE This product meets the Essential Requirement of all relevant European directives and is eligible for CE marking.

Meets essential requirements of the following European Directives:
WEEE Directive 2019/19/EU
RoHS Directive EU 2015/863
Note: Please follow your regional recycling scheme for batteries and electronic waste

Authorized European Representative

UK REP

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EU REP

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Email: oasisservicepl@outlook.com

Thank you for purchasing the Phenyx Pro PTL-600/800 Series. For the best results and utmost satisfaction with your new unit, please read this manual carefully to ensure proper operation, and keep it for future reference. For more information, please visit our store: www.phenyxpro.com

Table of Contents

System Description.....5

System overview.....5
System features.....5
System components.....5

Operation Guidance.....6

STEP 1: Connect inputs.....7
STEP 2: Connect outputs.....7
STEP 3: Power up the system.....7
STEP 4: Get sound to the speaker.....7

Functions of Parts.....8

Front Panel.....8

Rear Panel.....14

Troubleshooting Tips.....14

Specification.....15

Blog Diagram.....16

Technical Support & Warranty Information.....17

System Description

System overview

Introducing the latest in the Phenyx Pro mixer series, the PTL-600 and PTL-800, engineered to meet the demanding needs of professional audio setups. These mixers boast rich routing capabilities and flexible control options, making them ideal for various professional environments including small stages, DJ events, churches, and band rehearsals. The PTL series aims to route your passion and unleash full-scale audio flexibility by offering effective mixing solutions with advanced features.

System features

- **Extensive Inputs and Outputs:** The PTL-600/800 mixer is equipped with 4/6 XLR and TRS inputs to connect a variety of devices, complemented by two Aux outputs, a set of BUS outputs, and three XLR main outputs (L, R, Sub). Separate Sub output with low pass filter can output low frequency signal to the subwoofer. Additional connectivity includes two stereo headphone outputs for detailed monitoring and Bluetooth input for wireless streaming, ensuring flexibility for any setup requirement.
- **Advanced Routing:** These mixers allow precise audio management with selectable routing options. Aux sends can operate pre- or post-fader, channels can be directed to BUS for auxiliary control, and individual channels may be routed to Sub output. The FX channel can be optionally routed to Aux sends, enhancing control over complex audio landscapes.
- **Dual Stereo Headphone Outputs:** Offers two independently controlled stereo headphone outputs for flexible monitoring.
- **Independent +48V Phantom Power:** Each input channel is equipped with its own +48V phantom power switch, providing consistent, high-quality audio.
- **Optimized Vocal Preamps and EQ:** Designed specifically to enhance vocal clarity and warmth, the preamps and EQ settings enable sound engineers to quickly and effectively tweak vocal performances, ensuring pristine sound quality.
- **Bluetooth and USB Connectivity:** Supports Bluetooth for easy music streaming and USB for direct recording and playback, versatile for various audio sources.
- **BUS Auxiliary Track:** The BUS auxiliary track offers an innovative way to manage the overall volume of all targeted channels after balance adjustments, simplifying the control during live performances and providing an additional set of outputs for greater flexibility.

System components

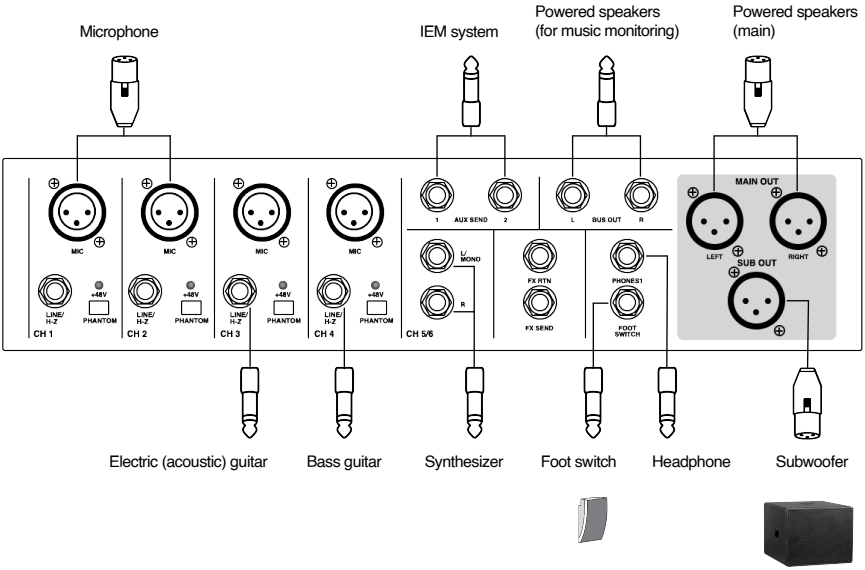
1 x PTL-600/PTL-800 Mixing Console
1 x User Manual
1 x Power Adapter

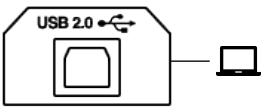
Operation Guidance

Phenyx Pro PTL-600 mixing console has 4 mono XLR & 1/4” separated inputs and 1 stereo 1/4” inputs.

Phenyx Pro PTL-800 mixing console has 6 mono XLR & 1/4” separated inputs and 1 stereo 1/4” inputs.

Taking connections of PTL-600 as an example:





Computer (for music streaming and recording) USB 2.0/USB-B jack

Connect to a second headphone for dual monitoring

STEP 1: Connect inputs

1 - Connect microphones

- Dynamic microphones: XLR/6.35mm
- Condenser microphones: XLR/6.35mm

  ***NOTE:** Remember to turn on separate +48V power to charge your condenser mics.

- Wireless microphone system: Connect 6.35mm or XLR cables between outputs of the wireless microphone receiver and MIC/LINE channel inputs of the mixer.

2 - Connect instruments: 6.35mm (mono/stereo). Some instruments require HI-Z (TS Input) to be turned on to function properly.

3 - Connect electronic devices: 6.35mm/USB-B/Bluetooth

STEP 2: Connect outputs

1 - Connect to the speaker/subwoofer: XLR

2 - Connect to the headphone: PHONES 1/PHONES 2 (6.35mm stereo)

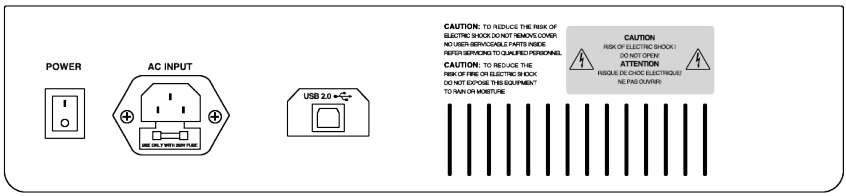
3 - Connect to the in-ear monitor system/powered wedge speaker: AUX SEND (6.35mm mono) / BUS OUT (6.35mm stereo)

STEP 3: Power up the system

1 - Make sure the mixer is OFF and all the connections are connected successfully

2 - Connect the mixer with the power cord

3 - Turn the mixer on



STEP 4: Get sound to the speaker

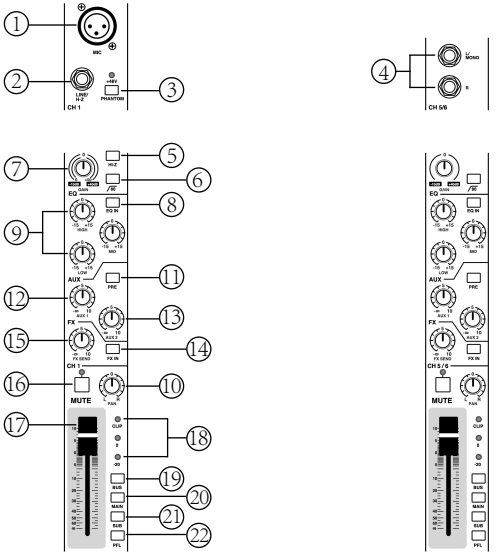
1 - Make sure all [LEVEL] faders, [GAIN] and [VOL] knobs are at the starting point (minimum), and 3-Band EQ and [PAN] knobs are at the middle, all buttons and switches are off.

2 - Turn on all devices, from microphones, instruments, sound equipments, PTL mixer to speakers.

3 - Adjust all knobs of all devices based on your need.

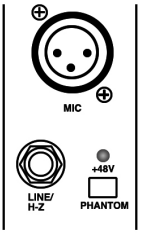
Functions of Parts

Front Panel



1 - Input Channel Block

1.1 Channel Connector Section



① **MIC input jack:** Accepts balanced XLR connectors. Connect microphones you intend to use.

② **LINE/HIZ input jack:** Accepts 6.35mm (1/4") Balanced TRS/Unbalanced TS connectors.

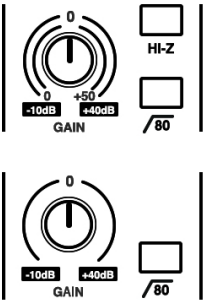
③ **+48V PHANTOM power switch and indicator:** This switch toggles phantom power on and off. Turn this switch on (▬) to supply DC +48V when connecting a condenser microphone.

***NOTE:** Please leave it off (▬) if you do not need phantom power to prevent noise and possible damage to external devices.

1.2 Stereo Channel Connector Section

④ **Line (L/MONO, R) input jacks:** Balanced TRS/Unbalanced TS stereo input jacks. [L/MONO] accepts mono input.

1.3 HI-Z, LOW CUT, GAIN

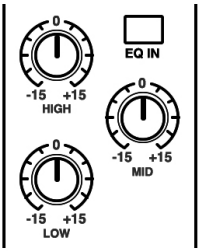


⑤ **HI-Z switch:** This button toggles TRS and TS signal input. Turn it off ( ) to accept balanced TRS line signal, and turn it on ( ) to accept unbalanced TS signal. It is used to raise the input impedance of the mixer channel for better handling the higher impedance signal from electric/bass guitar or other instrument without overloading or distorting it.

⑥ **LOW CUT switch:** This high-slope LOW CUT filter for eliminating unwanted, low-frequency signal components (80Hz, 18dB/octave).

⑦ **[GAIN] knob:** For adjusting the gain of the input signal. The adjustable gain range differs, one range is among 0dB to +50dB for the MIC input, and the other is among -10dB to +40dB for line input.

1.4 Equalizer



⑧ **EQ IN switch:** This switch toggles whether the input signal pass the equalizer knobs.

⑨ **Equalizer knobs (HIGH/MID/LOW):** The equalizer shapes the high, mid, and low audio frequencies. Twisting the knob to the right amplifiers (boosts) the corresponding frequency band while turning it to the left attenuates (cuts) the band. Setting the knob to the middle position produces a flat response in the corresponding band. The upper knob sets the variable mid frequency, while the lower knob sets the amount of attenuation or boost (counterclockwise/clockwise) for the range.

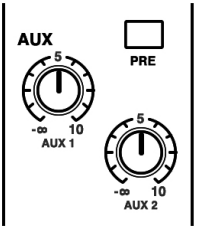
1.5 PAN

⑩ **PAN knob:** Sets the position of the sound image within the stereo field. This knob adjusts the volume balance of each channel pre-fader signals sent to all buses. When the knob is set to the 12 o'clock position, the channel's sound will be sent to the LEFT and RIGHT jacks of the main out bus at the same volume. In this case, the sound image is positioned at the center.

1.6 Aux Sends

Each channel can feed its signal level/amount to the corresponding auxiliary bus AUX 1 and AUX 2 jacks by adjusting this part.

⑪ **PRE switch:** Toggle routing the pre-fader (▂) (the signal before fader adjustment) or post-fader (▄) (the signal after fader adjustment) signal to the auxiliary bus. This switch would not affect route to other buses.



***NOTE:** If you press the [MUTE] switch of the respective channel, pre-fader (▂) signal routed to the auxiliary bus are not being muted, while post-fader (▄) routed to [AUX SEND] jacks are muted.

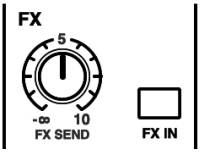
⑫ **AUX 1 channel knob:** For adjusting the level of each channel signal sent to the AUX 1 jack.

⑬ **AUX 2 channel knob:** For adjusting the level of each channel signal sent to the AUX 2 jack.

1.7 FX Sends

Each channel can feed its signal to the FX bus by adjusting the FX SEND knob. The FX IN adjusts effects of FX SEND & RTN jacks (usually connecting the for external processor) and built-in DSP effects to each channel.

⑭ **FX IN switch:** Toggles whether to add (▂)the effect from external processor or built-in DSP to the channel mix or not (▄).

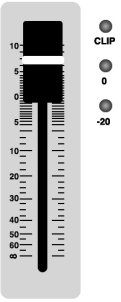


⑮ **FX SEND knob:** For adjusting the level/amount of channel signal sent to the FX bus.

1.8 Mute Switch & Channel Fader

⑯ **MUTE switch:** Turn on (▂) this switch to mute the channel. This means that the channel signal is no longer sent to all buses. The MUTE LED lights up to indicate the channel is muted.

***NOTE:** If the [PRE] switch is on (▂), the channel signal is already sent to the auxiliary bus and can not reach to this fader part.



⑰ **Channel level fader:** For adjusting the level of the channel signal.

***NOTE:** To minimize noise, set the fader for any unused channels to the minimum.

⑱ **Channel level meter:** Indicates the level of the channel signal. The “0” segment corresponds to the nominal output level. The level meter LED lights when output reaches the corresponding clipping level.

1.9 Channel Bus Assignment

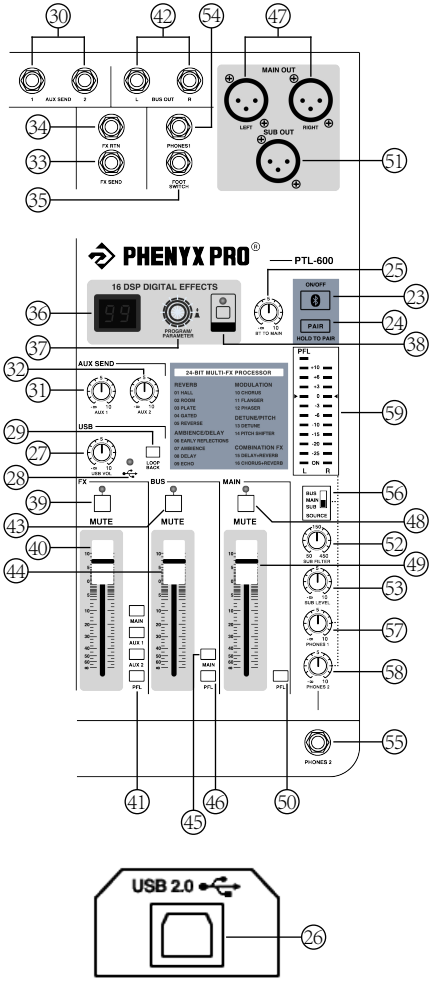
These channel bus assign switches determine the bus(es) to which each channel’s signal is sent. Turn on the switches (▂) to output the channel signal to the corresponding buses. Each bus assignment would not affect each other’s routing.

⑲ **BUS channel switch:** Turn on (▂) this switch to assign the channel signal to the BUS OUT bus (to BUS OUT output jacks).

⑳ **MAIN channel switch:** Turn on (▬) this switch to assign the channel signal to the main out bus (to MAIN OUT stereo output jacks).

㉑ **SUB channel switch:** Turn on (▬) this switch to assign the channel signal to the sub out bus (to the SUB OUT output jack).

㉒ **PFL switch:** Turn on (▬) this switch to assign the channel signal to the monitor bus (to the PHONES 1 and PHONES 2 jacks) for headphone monitoring.



2 - Functions & Master Block

2.1 Bluetooth & USB Section

㉓ **Bluetooth ON/OFF button:** Short press to initiate the Bluetooth function, and long press this button to turn off the function. The Bluetooth LED light on the button lights up when the Bluetooth function is initiated, flashes when unconnected, and stays on when connected. the icon LED light on the button flashes.

㉔ **PAIR button:** Short press this button to disconnect the Bluetooth connection and connect to a new one.

㉕ **BT TO MAIN level knob:** For adjusting the level of Bluetooth streaming music sent to main out bus.

㉖ **USB 2.0 jack:** The USB 2.0 jack on the rear panel is for connecting a computer via a USB-B cable.

㉗ **USB VOL knob:** For adjusting the level of USB streaming music sent to main out bus.

㉘ **USB LED light:** Lights up to indicate the USB connection is successful.

㉙ **LOOP BACK switch:** Turn on this switch (▬) to input the signal from USB 2.0 jack back to the mixer.

2.2 Auxiliary Bus Section

㉚ **AUX SEND jacks:** Accept unbalanced TS phone-type connectors. These output jacks are mono, which take all channel signals summing together and route to the auxiliary bus.

㉛ **AUX 1 level knob:** For adjusting the level of mixed signals from all channels sent to the AUX 1 jack.

㉜ **AUX 2 level knob:** For adjusting the level of mixed signals from all channels sent to the AUX 2 jack.

2.3 FX Bus Section

The FX bus includes signals route to [FX SEND & FX RTN] jacks

㉝ **FX SEND jack:** Accepts Balanced TRS/Unbalanced TS connectors. This jack is used to send the sound from the mixing console to the external audio processor/effector.

㉞ **FX RTN jack:** Accepts Balanced TRS/Unbalanced TS connectors. This jack is used to receive the sound from the external audio processor/effector to the mixing console.

㉟ **FOOT SWITCH jack:** Accepts a foot switch to the 6.35mm TS phone-type input jack. Connect a foot switch to toggle effects ON and OFF via the external processor.

2.4 Built-in 16 DSP Effects

㊱ **DSP LCD screen:** Indicates the selected effect program number and effect parameter. The corresponding program number flashes during selection and returns to the last effect selected if the setting is not confirmed. The period behind the number flashes indicating the process of setting the effect parameter/depth.

㊲ **PROGRAM/PARAMETER knob:** Turn the knob counterclockwise/clockwise to select desired effect. The corresponding program number flashes during selection and confirms automatically after a few seconds. Press the knob to select effect depth, turn the knob counterclockwise/clockwise to adjust, and press it again to confirm setting.

㊳ **TAP button:** Press to set the timing of time-based effects such as delay and reverb. The setting will confirm automatically after a few seconds.

2.5 FX Channel Control

FX SEND jack, FX RTN jack, and the built-in effects section share the same control fader. If the FX SEND & RTN jacks are connected (usually to an external processor), the fader controls the signal mix from them; otherwise, it controls the signal mix from build-in effects.

㊴ **MUTE switch & light:** Turn on (▂) this switch to mute the FX mix. This means that the signal mix is no longer sent to the FX bus. The MUTE LED lights up to indicate the FX mix is muted.

㊵ **FX level fader:** For adjusting the level of FX signal mix to the buses.

㊶ **FX bus assignment:** Turn on (▂) these switches for assigning the FX signal mix to the corresponding buses.

2.6 BUS OUT Bus Section & Control

㊷ **BUS OUT stereo output jack:** Accepts TRS balanced/ TS unbalanced connectors. It functions as a mono output when used individually, and as stereo outputs when both jacks are utilized together.

㊸ **MUTE switch & light:** Turn on (▬) this switch to mute the bus out mix. This means that the signal mix is no longer sent to the bus out bus. The MUTE LED light lights up to indicate the bus out mix is muted.

㊹ **BUS OUT level fader:** For adjusting the level of the signal mix to the bus out bus.

㊺ **MAIN switch:** Turn on (▬) this switch to assign the bus out mix to the main out bus (to MAIN OUT stereo output jacks).

㊻ **PFL switch:** Turn on (▬) this switch to assign the pre-fader signal mix of the bus out bus to the monitor bus (to the PHONES 1 and PHONES 2 jacks). This switch is for headphone pre-fader monitoring.

2.7 Main Out Bus Section & Control

㊼ **MAIN OUT stereo output jacks:** Accepts balanced XLR connectors for mixed stereo signal.

㊽ **MUTE switch & light:** Turn on (▬) this switch to mute the main out mix. This means that the signal mix is no longer sent to the main out bus. The MUTE LED light lights up to indicate the main out mix is muted.

㊾ **Main Out level fader:** For adjusting the level of signal mix to the main out bus.

㊿ **PFL switch:** Turn on (▬) this switch to assign the signal mix of the main out bus to the monitor bus (to the PHONES 1 and PHONES 2 jacks). This switch is for headphone monitoring.

2.8 Sub Out Bus Section & Control

(51) **SUB OUT mono output jack:** Accepts balanced XLR connector. This jack can connect a subwoofer for low frequency (sub frequency) output.

(52) **SUB FILTER knob:** This knob is a low-pass filter to attenuates signals above a certain Hz threshold for accurate low-frequency response. Twist the knob to set the frequency threshold to begin filtering.

(53) **SUB LEVEL knob:** For adjusting the level of signal mix to the sub out bus.

2.9 Monitor Bus Section & Control

(54) **PHONES 1 jack:** For connecting a pair of headphones to this 6.35mm (1/4") TRS unbalanced jack.

(55) **PHONES 2 jack:** For connecting a pair of headphones to this 6.35mm (1/4") TRS unbalanced jack.

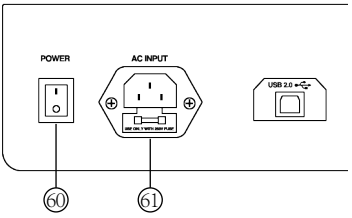
(56) **SOURCE switch:** This switch controls bus signal mix from BUS/MAIN/SUB out fed to the headphone bus for monitoring.

⑰ **PHONES 1 level knob:** For adjusting the level of the signal mix fed to PHONES 1 jack.

⑱ **PHONES 2 level knob:** For adjusting the level of the signal mix fed to PHONES 2 jack.

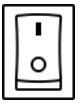
⑲ **Level Meter:** Indicates the signal strength of audio channels.

Rear Panel



3 - Power supply block

⑳ **Power Switch:** Use this switch to control the unit's power. Press the switch to the 'on' position to turn the power on, and to the 'off' position to turn the power off.



㉑ **AC INPUT:** Connect the included power cord here.

Troubleshooting Tips

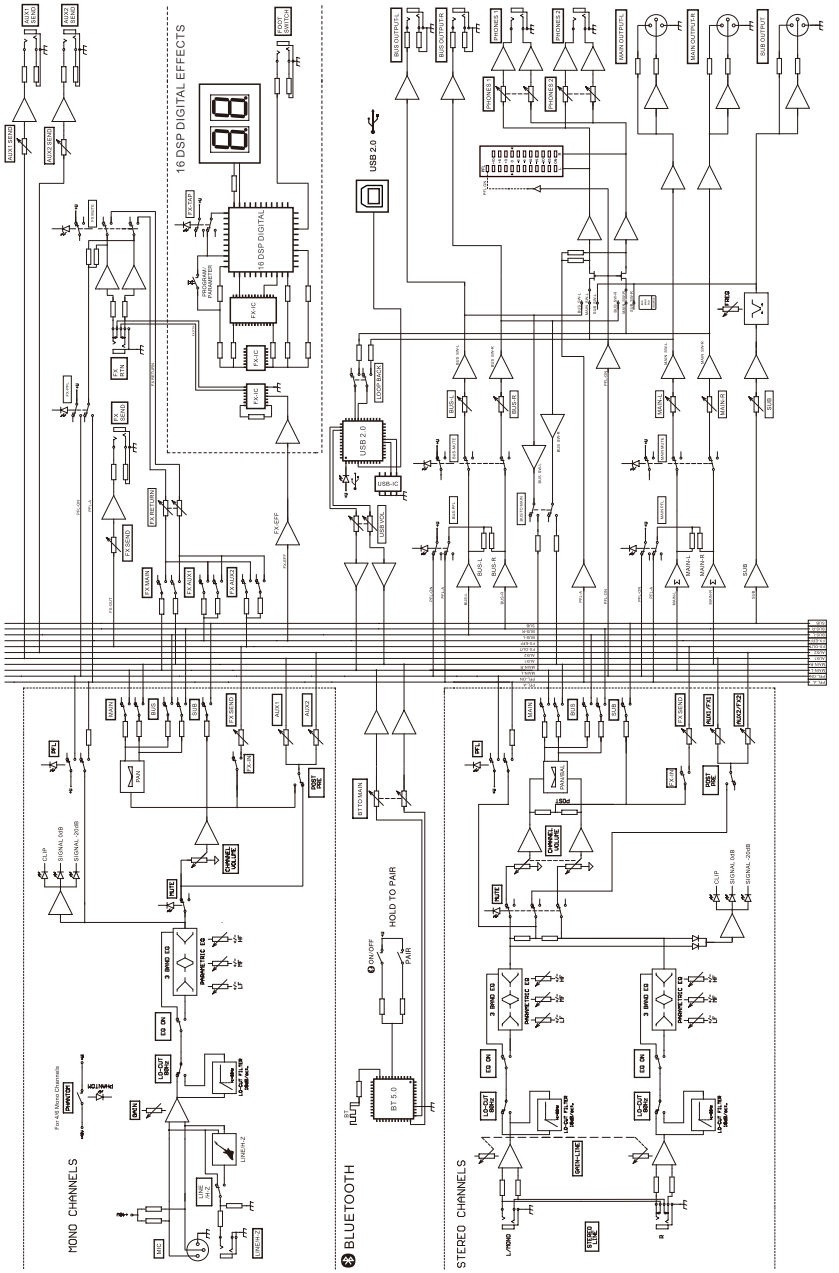
ISSUE	SOLUTION
The mixer cannot be turned on.	1. Check if the power adapter correctly plugged into the correct AC outlet. 2. Check if the power switch is on ON position.
There is no sound.	1. Check if the power speaker or amplifier is on. 2. Check if any external devices and speaker are properly connected. 3. Check if the microphone is connected correctly. 4. Check if the knobs for all relevant channels are set to the appropriate levels. 5. Check if the MUTE buttons are pressed on the relevant channels.
Sound is distorted and noisy.	1. Adjust the Gain or the volume faders to appropriate positions. 2. Lower the volume of the connected device.

Specification

System Specification

	PTL-600	PTL-800
Frequency Response	20 Hz~30 kHz	20 Hz~30 kHz
Total Harmonic Distortion	≤0.03 %	≤0.03 %
S/N Ratio	≥95 dB	≥95 dB
Voltage Gain (mono/stereo)	≥50 dB	≥50 dB
Input Sensitivity	"Mic-60 dB Line-44 dB"	"Mic-60 dB Line-44 dB"
NET Weight	3.8 kg	4.6 kg
Power Requirements	100~240 V 50 Hz/60 Hz	100~240 V 50 Hz/60 Hz
Power Consumption	45 W max	45 W max

Blog Diagram



Technical Support & Warranty Information

Our warranty to you:
Phenyx Technology ("Phenyx") warrants Phenyx products against evident defects in material and workmanship for a period of one year from the date of original purchase for use.This warranty is valid exclusively in the US and applies only to the original owner. If you discover a defect covered by this warranty, Phenyx will repair or replace the product at our sole discretion using new or refurbished components. Performance of repairs or replacements under this warranty is subject to registration of your product at www.phenyxpro.com

Product failures not covered by this warranty:
This warranty covers defects in manufacturing that arise from the correct use of the device. It is limited to defects in materials or workmanship and does not cover electrical or mechanical damage resulting from abuse, misuse, unauthorized modification, lack of reasonable care, extreme heat, cold, damage due to natural forces,or corrosive environments. This warranty does not cover the normal wear and tear on covers, housing, connectors, and accessories.

Limits of liability:
If your Phenyx product fails or does not perform as warranted, your sole recourse shall be to replace or repair it as described above. Phenyx will not be liable to you or anyone else for any damages that result from the failure of this product. These damages include, but are not limited to, the following: lost profits, lost savings, lost data, damage to other equipment, and incidental or consequential damages arising from the use of or inability to use this product. IN NO EVENT PHENYX SHALL BE LIABLE FOR MORE THAN THE AMOUNT OF YOUR PURCHASE PRICE, NOT TO EXCEED THE CURRENT LIST PRICE OF THE PRODUCT.

How to obtain service under this warranty:
If you are receiving a system that is defective or you have any questions regarding operation or warranty cover, please contact us at support@phenyxpro.com with any questions or concerns and a Phenyx Pro representative will contact you to provide assistance. You can also reach out to us through Facebook page: www.-facebook.com/phenyxusa/ or our official website: www.phenyxpro.com.