



# TrueMix 600

## User Guide



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Thank you for purchasing the TrueMix 600. At Alto Professional, performance and reliability mean as much to us as they do to you. We design our equipment with only one thing in mind—to make your performance the best it can be.

**Note:** For clarity, this User Guide uses section references. In some instances, one section may extend to several pages.

## (1.1) Box Contents

TrueMix 600	Registration Card
Power Adapter	Quickstart Guide
USB Cable	Safety & Warranty Manual
Extra Knob Caps	

## (1.2) Support

For the latest information about this product (system requirements, compatibility information, etc.) and product registration, visit [altoprofessional.com](http://altoprofessional.com).

For additional product support, visit [altoprofessional.com/support](http://altoprofessional.com/support).

## (1.3) Important Safety Precautions

**Please note:** Alto Professional and inMusic are not responsible for the use of its products or the misuse of this information for any purpose. Alto Professional and inMusic are not responsible for the misuse of its products caused by avoiding compliance with inspection and maintenance procedures. Please also refer to the included safety and warranty manual for more information.

## (1.4) Sound Level

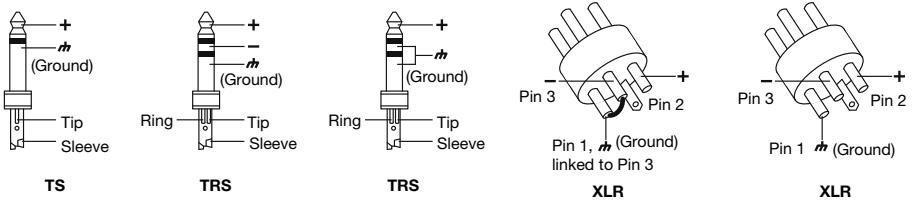
Permanent hearing loss may be caused by exposure to extremely high noise levels. The U.S. Occupational Safety and Health Administration (OSHA) has specified permissible exposures to certain noise levels. According to OSHA, exposure to high sound pressure levels (SPL) in excess of these limits may result in hearing loss. When using equipment capable of generating high SPL, use hearing protection while such equipment is under operation.

Hours per day	SPL (dB)	Example
8	90	Small gig
6	92	Train
4	95	Subway train
3	97	High-level desktop monitors
2	100	Classical music concert
1.5	102	Riveting machine
1	105	Machine factory
0.5	110	Airport
0.25 or less	115	Rock concert

## (2.1) Connection Diagram

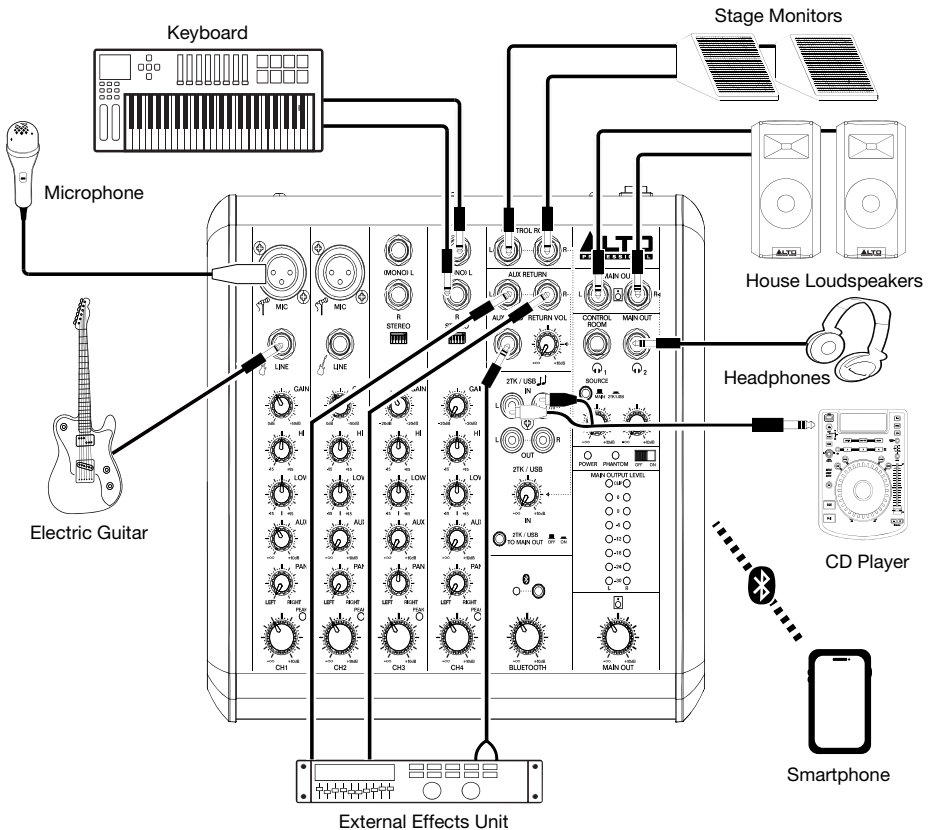
Items not listed under [\(1.1\) Introduction > Box Contents](#) are sold separately.

See the connector examples below for using XLR or 1/4" (6.35 mm) wiring as balanced or unbalanced. This can be of help if you make your own cables.

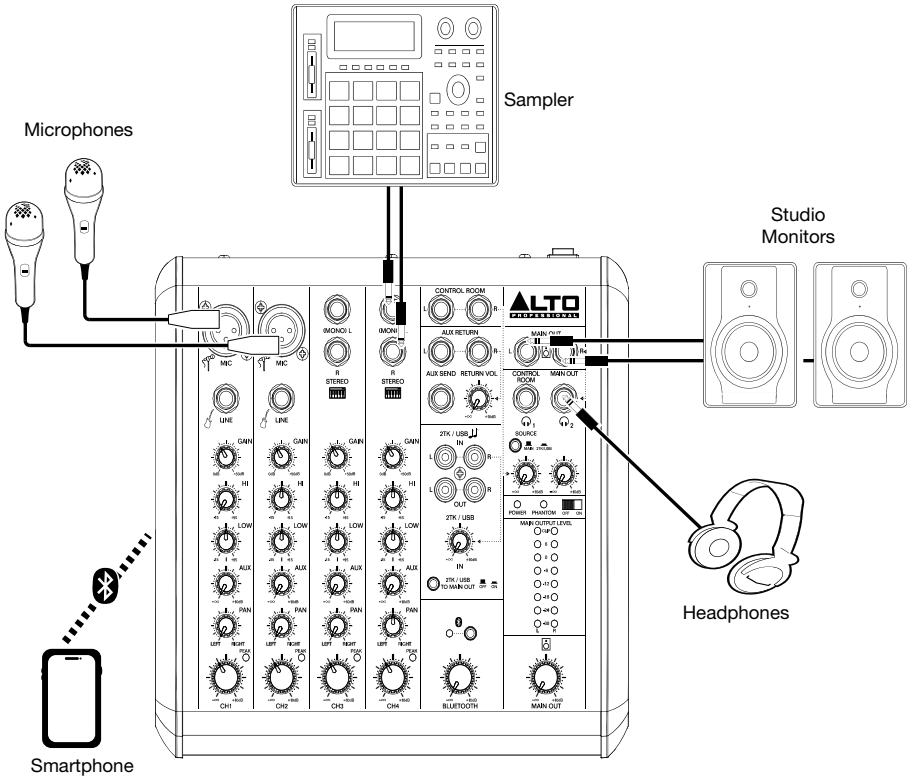


### (2.1.1) Top Panel

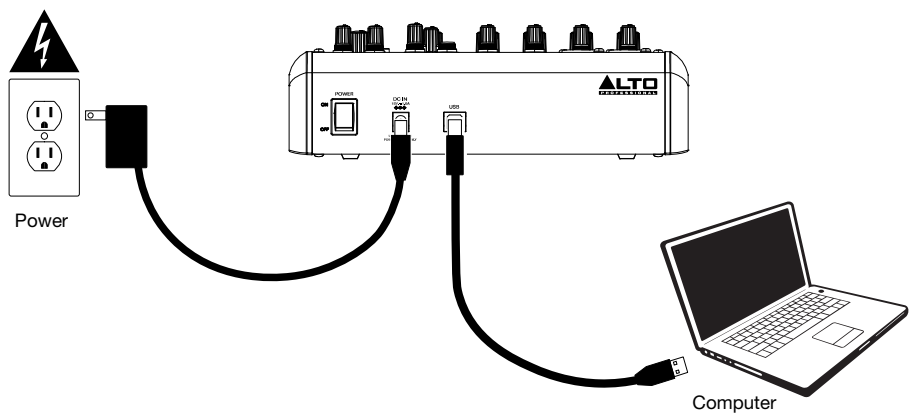
#### Example 1 - Live Sound:



Example 2 - Podcast:



## (2.1.2) Rear Panel



## **(2.2) Common Setup Scenarios**

### **(2.2.1) Live Sound**

1. Study the **Live Sound** [\(2.1\) Connection Diagram](#) section for ideas to plan your setup.
2. Choose a layout for your gear that compliments the venue's walkways, power locations, and acoustics (so you can properly hear your mix).
3. Make sure all devices are turned off.
4. Set all TrueMix 600 **Gain knobs** to -20 dB, **Channel Volume knobs** to  $-\infty$ , **Hi** and **Low EQ knobs** to the 12 o'clock position, and **Main Out Volume knob** to  $-\infty$ .
5. Connect all input sources, such as microphones, keyboard, electric guitar, or a CD player to the appropriate XLR, 1/4" (6.35 mm), or RCA inputs.
6. If using an external effects unit, connect the **Aux Send** of TrueMix 600 to the inputs of the effects unit. Connect the outputs of the effects unit to the **Aux Return** of TrueMix 600.
7. Connect all output sources. For example, you can connect TrueMix 600's **Main Out** to the house loudspeakers using 1/4" (6.35 mm) cables, or connect the **Aux Send** to stage monitors using 1/4" (6.35 mm) cables (if you are not already using these for an external effects unit).
8. Pair your Bluetooth device with TrueMix 600. See the section [\(4.2\) Operation > Connecting a Bluetooth Device](#) for more details.
9. Connect all devices to power outlets.
10. Switch everything on in the following order:
  - Audio input sources
  - TrueMix 600
  - Last, any speakers or headphones
11. Test the mic at the loudest level it is expected to be used and begin turning up the **Gain knob** until you see the channel **Peak LED** flash red. This means the Gain knob is set too high. Turn down the **Gain knob** until you no longer see the LED flash red. Repeat this process for other channels you are using.
12. If you are using stage monitors, create the monitor mix by adjusting each channel's **Aux Send** level. The more you turn up a channel's **Aux knob**, the more they will hear it in the connected stage monitor.
13. Send TrueMix 600's channels to the **Main Outs** (house loudspeakers) by turning up the **Channel Volume knobs**.
14. Turn up the **Main Out Volume knob** until the volume compliments the venue. You'll want to get the **Main Output Level LED Meter** as close to the top LED without it clipping.
15. When turning off equipment, follow this order:
  - Speakers or headphones
  - TrueMix 600
  - Last, any audio input devices



### Tips:

- If the sound is too boomy, decrease the low EQ frequencies.
- For more clarity, boost the high EQ frequencies.
- **Never** point microphones and speakers at each other.
- Mute unused channels when they're not in use.
- Use board tape to label channels.
- **Always** have backup cables.

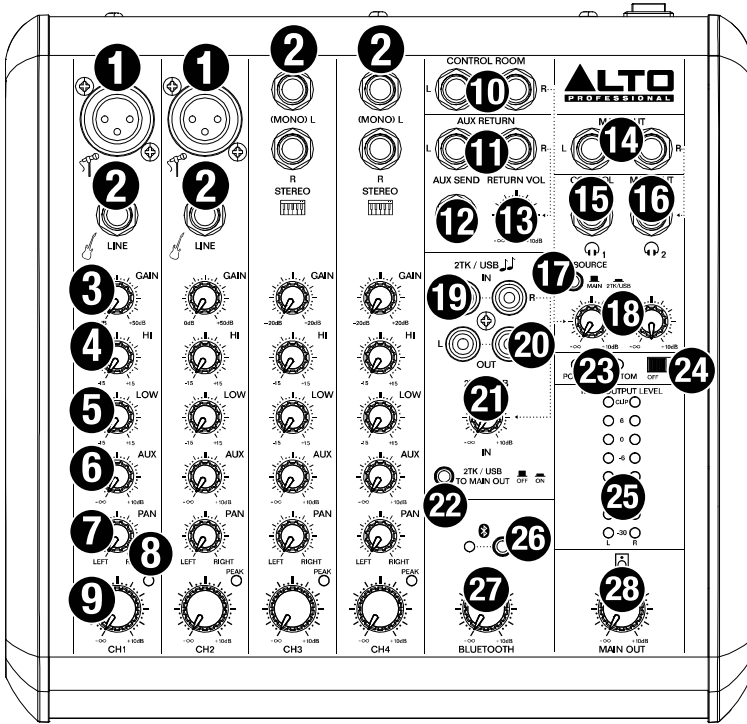
### (2.2.2) Podcasting

1. Study the **Podcast (2.1) Connection Diagram** section for ideas to plan your setup.
2. Choose a layout for your gear that compliments your desk and power locations.
3. Make sure all devices are turned off.
4. Set all TrueMix 600 **Gain knobs** to -20 dB, **Channel Volume knobs** to  $-\infty$ , **Hi** and **Low EQ knobs** to 12 o'clock, and **Main Out Volume knob** to  $-\infty$ .
5. Connect all input sources, such as microphones, keyboard, or a sampler to the appropriate XLR or 1/4" (6.35 mm) inputs.
6. Connect a laptop for streaming or recording of a podcast via a USB connection. See the section **(4.1) Operation > USB Recording and Playback** for more details.
7. Connect TrueMix 600's **Main Out** to your speakers using 1/4" (6.35 mm) cables.
8. Pair your smartphone with TrueMix 600 to stream calls or interviews. See the section **(4.2) Operation > Connecting a Bluetooth Device** for more details.

**Note:** To avoid RF interference from being picked up, place your smartphone away from speakers.

9. Connect all devices to power outlets.
10. Switch everything on in the following order:
  - Audio input sources
  - TrueMix 600
  - Last, any speakers or headphones
11. Speak into your mic at the loudest level you expect to speak in your stream and begin turning up the **Gain knob** until you see the channel **Peak LED** flash red. This means the Gain knob is set too high. Turn down the **Gain knob** until you no longer see the LED flash red. Repeat this process for other channels you are using.
12. Send TrueMix 600's channels to the **Main Outs** by turning up the **Channel Volume knobs**.
13. Turn up the **Main Out Volume knob** until a desired volume is reached. You'll want to get the **Main Output Level LED Meter** as close to the top LED without it clipping.
14. When turning off equipment, follow this order:
  - Speakers or headphones
  - TrueMix 600
  - Last, any audio input devices

## (3.1) Top Panel



1. **Mic Inputs:** Connect a microphone to these phantom power-equipped inputs using an XLR cable (sold separately). See the [Phantom Power Switch](#) feature for more details.
2. **Line Inputs:** Connect line-level devices to these inputs with 1/4" (6.35 mm) cables (sold separately).

**Note:** The line inputs on channels 3 and 4 are stereo inputs.

Connecting a device using a single cable to only the **L (Mono)** input will send the signal through both the Left and Right **Main Mix Output** channels.

Connecting to only the **R (Stereo)** line input will send the signal through the Right Mix channel only.

3. **Gain:** Turn this knob to adjust the channel audio level (pre-fader and pre-EQ gain). Set the gain to a level at which the **Peak LED** just barely lights up during the loudest parts of the song.
4. **HI EQ (Treble):** Turn this knob to adjust the high (treble) frequencies of the channel's output signal.
5. **LOW EQ (Bass):** Turn this knob to adjust the low (bass) frequencies of the channel's output signal.

### (3.0) FEATURES

- Aux Send Knob:** Turn this knob to adjust the signal volume sent from the channel input to the **Aux Send Output**. This knob also adjusts the signal volume sent back to the **Bluetooth** channel during use on a phone call with a connected device. See the section [\(4.2\) Operation > Connecting a Bluetooth Device](#) for more details.

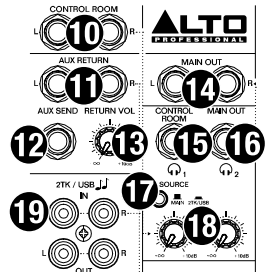


- Channel Pan:** Turn this knob to adjust the (mono) channel's Left-Right position in the stereo field.

- Peak LED:** This LED will flash when the signal is clipping. If this happens, decrease the level on the **Gain** knob or **Channel Volume** knob.

- Channel Volume:** Turn this knob to adjust the level of the channel's output signal.

- Control Room Outputs:** Use 1/4" (6.35 mm) TS cables to connect these outputs to your monitor or amplifier system. The level of these outputs is controlled by the **Control Room Headphone Output** knob.



- Aux Return Inputs:** Connect the outputs of an external device to these inputs with standard 1/4" (6.35 mm) cables. Aux Return is commonly used for outboard effects devices but can also be used like an extra input channel for synthesizers, drum machines, etc. If your source is mono, plug it into the left input and it will be heard on both the left and right sides. The level of these inputs is controlled by the **Aux Return** volume knob.

- Aux Send Output:** Use a 1/4" (6.35 mm) TRS cable to connect the Aux Send output to the input of an external amplifier or active monitor to create a custom monitor mix for onstage musicians. You can adjust the signal volume for each channel in this mix using the **Aux Send** knobs.

- Aux Return Volume:** Turn this knob to adjust the level of the signal sent from the **Aux Return Inputs** to the **Main Output**.

- Main Outputs:** Use 1/4" (6.35 mm) TRS cables to connect these outputs to a speaker or amplifier system. The level of these outputs is controlled by the **Main Out** knob.

- Control Room/Headphone Output (1):** Connect a pair of stereo headphones to this 1/4" (6.35 mm) TRS output to monitor your **Main Output** or **2TK/USB** signals.

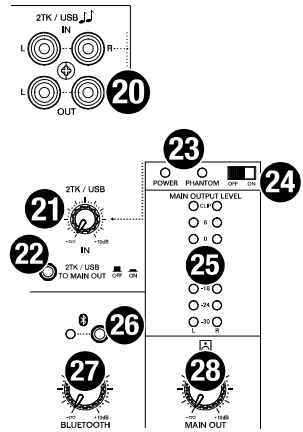
- Main Out/Headphone Output (2):** Connect a pair of stereo headphones to this 1/4" (6.35 mm) TRS output to monitor your **Main Output** signal.

- Headphone Source:** Press this button to switch the **Headphone Output 1** source between the **Main Out** and **2TK/USB**. **Headphone Output 2** monitors the Main Output *only* and is unaffected by this button.

- Headphone/Control Room Volume Controls:** Turn these knobs to adjust the volume of the corresponding Headphone outputs directly above. The volume knob for Headphone Output 1 also controls the **Control Room Output** volume.

- 2TK/USB Inputs:** You may connect these inputs to the outputs of an external sound source using a standard stereo RCA cable (sold separately). You can also send this channel to the headphone mix (using the **Headphone Source** button) and/or the main mix (using the **2TK/USB To Main Out** button).

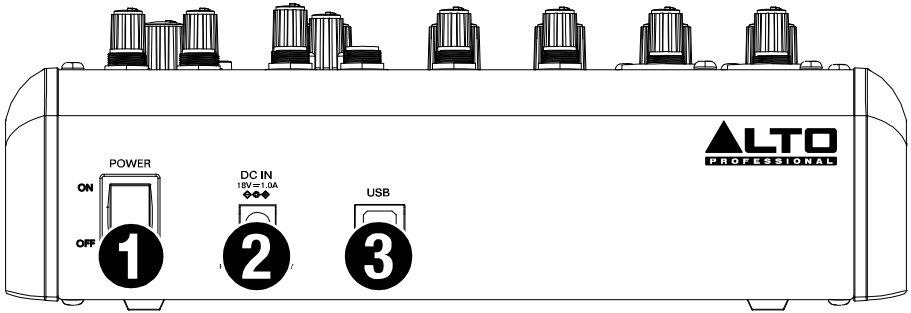
20. **2TK/USB Outputs:** You may connect these outputs to the inputs of an external recording device using a standard stereo RCA cable (sold separately).
21. **2TK/USB In Volume:** Turn this knob to adjust the volume of your **2TK/USB Input** signal.
22. **2TK/USB To Main Out:** Press this button to send the **2TK/USB Input** signal through the **Main Outputs**.
23. **Power/Phantom LEDs:** The **Power** LED will illuminate when the mixer is powered on. The **Phantom** LED will illuminate when the **Phantom Power Switch** is in the ON position.
24. **Phantom Power Switch:** Set this switch to the ON position to send 48 Volts of phantom power to the Mic Inputs.



**Note:** Most dynamic microphones do not require phantom power, while most condenser microphones do. Please use caution and consult your microphone's documentation to find out if it requires phantom power **before** connecting your microphone to the **Mic Inputs** and attempting to use this function. Misapplication of this function can damage certain types of microphones, such as ribbon microphones. Always connect the microphone **FIRST**, then turn on phantom power.

25. **Output Level LED Meters:** These LEDs display the audio level of the **Main Output**. Turn the **Main Out Volume** down if the Clip LED at the top of the meter lights up excessively.
26. **Bluetooth Pairing Button:** Press and hold this button to activate Bluetooth pairing mode to connect a Bluetooth device with TrueMix 600. See the section [\(4.2\) Operation > Connecting a Bluetooth Device](#) for further instructions.
27. **Bluetooth Volume:** Turn this knob to adjust the volume of the Bluetooth signal being sent to the **Main Output**.
28. **Main Out Volume:** Turn this knob to adjust the volume of the Main Output.

### (3.2) Rear Panel



1. **Power Switch:** Flip this switch to power TrueMix 600 on and off.

**Note:** Always make sure to only turn the mixer on *after* all input devices have been connected and *before* you turn on amplifiers. Always turn off all amplifiers *before* you turn the mixer off.

2. **Power:** Use the included power adapter to connect TrueMix 600 to a power outlet.

**Note:** Make sure the Power Switch is in the **OFF** position before connecting the mixer to a power outlet.

3. **USB Out:** Connect a USB Type-B cable here to use the TrueMix 600 with a computer for recording and playback. See the section [\(4.1\) Operation > USB Recording and Playback](#) to learn how to do this.

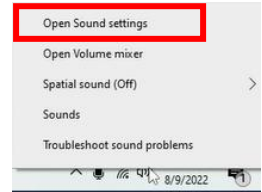
### (4.1) USB Recording and Playback

To set TrueMix 600 as the default playback device on your computer, follow the set of directions below that corresponds to your computer's operating system.

**Note:** If you have other USB audio devices connected to your computer, which may have identical names, you may need to try selecting each one until the TrueMix 600 is recognized.

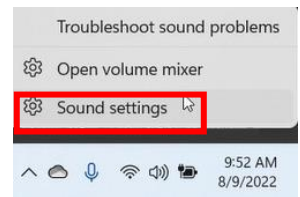
#### Windows 10:

1. Use the included USB cable to connect the TrueMix 600 to your computer. Press the **power switch** to power on TrueMix 600.
2. Press the Windows key and then type "Sound Settings" into the search bar. Alternatively, right-click the "speaker" icon in the taskbar and select **Open Sound Settings**.
3. In the **Windows Sound** control panel select the **Output** dropdown box and select **USB Audio Codec**.
4. Select the **Input** dropdown box and select **USB Audio Codec**.
5. Close the Sound control panel.



#### Windows 11:

1. Use the included USB cable to connect the TrueMix 600 to your computer. Press the **power switch** to power on TrueMix 600.
2. Press the Windows key and then type "Sound Settings" into the search bar. Alternatively, right-click the "speaker" icon in the taskbar and select **Sound Settings**.
3. In the **Windows Sound** control panel select the **Output** section and select **USB Audio Codec**.
4. In the **Input** section select **USB Audio Codec**.
5. Close the Sound control panel.



#### macOS:

1. Use the included USB cable to connect the TrueMix 600 to your computer. Press the **power switch** to power on TrueMix 600.
2. Go to **Applications > Utilities > Audio MIDI Setup**.
3. In the **Audio Devices** window, select **USB Audio Codec** in the left column.
4. Right-click **USB Audio Codec** and select **Use this device for sound input**.
5. Right-click **USB Audio Codec** and select **Use this device for sound output**.
6. Quit Audio MIDI Setup.

### (4.2) Connecting a Bluetooth Device

1. Press and hold the **Bluetooth** button for 3 seconds, then release it. TrueMix 600 will go into Bluetooth pairing mode and the blue LED will begin flashing repeatedly. Bluetooth pairing will time out after 2 minutes if no device is connected.

**Note:** Pressing the **Bluetooth** button again during pairing process before a device is paired will cancel the pairing process.

2. Navigate to your Bluetooth device's setup screen, find the device named "**TrueMix 600**" and connect.
3. When paired successfully, the blue LED will illuminate solid.

**Note:** If your Bluetooth device prompts that a pairing code is required, use "**0000**".

4. Turn up the volume on your Bluetooth device and then turn up the Bluetooth volume knob. If signal distortion occurs, turn down the volume on your Bluetooth device.

To disconnect a paired device, press and hold the **Bluetooth** button for 3 seconds.

The next time Bluetooth pairing is activated, TrueMix 600 will try to connect with the last device that was paired with it. If after 2 minutes the last paired device is unavailable, it will go into standby mode until you initiate a new device pairing.

#### Notes:

1. The TrueMix 600's Bluetooth memory can store up to 5 user devices.
2. Pressing and holding the **Bluetooth** button for 10 seconds while a device is paired will unpair the device and remove it from memory.

#### Interfacing with Bluetooth Calls:

TrueMix 600 has a special feature for use with Bluetooth-connected smartphones called **Mix-Minus Return**. This feature allows you to send signal from the **Mic/Line** inputs to a connected smartphone without generating feedback or echo from incoming call audio. This is useful for cleanly recording a remote phone call for a podcast or radio show.

**To send a Mic or Line signal to a Bluetooth-connected smartphone**, turn up the **Aux Send** knob on the channel you want to send to set the desired signal level to be received by the phone.

### **If the mixer is not being detected by your computer:**

- Connect to a different USB port.
- Avoid using passive (unpowered) USB hubs.
- Try using a different USB cable.
- Disconnect other USB devices.
- Disable Windows sleep and screensaver when recording/streaming.

### **If no sound is heard from your speakers:**

- Make sure the input **Gain knobs**, **Channel Volume knobs**, and **Main Out Volume knobs** are turned up.
- Make sure microphones, external devices, and speakers are properly connected with working, secure cables.

### **If the sound is distorted:**

- Try lowering the volume control of your sound source, musical instrument, or microphone.
- Try adjusting the channel EQ if there is too much treble or bass.
- Turn the input **Gain knobs** to the left to lower the signal.
- Adjust the overall volume of the mixer using the **Main Out Volume knob**.

### **If there is a hum when cables are connected:**

- Disconnect cables from the input jacks to see if it's a faulty cable.
- Use balanced cabling connections whenever possible.
- Make sure the signal cables are not placed near power cables.
- Connect all audio equipment power cables to outlets which share a common ground.

### **If there is a high-pitched whistling noise when using microphones:**

- This is probably feedback. Point the microphone away from the speaker.

### **If you are streaming audio and the quality is choppy:**

- Ensure you are connected to a USB 2.0 port.
- Ensure your Wi-Fi connection is strong.
- Try a wired Ethernet connection for lower latency, a more reliable connection, and a stronger signal.

### **If there is latency when recording:**

- Ensure you are connected to a USB 2.0 port.
- Close all other unneeded programs running on the computer.
- Adjust the buffer size in your DAW, in increments of 64.



### If you cannot connect your audio device to TrueMix 600 via Bluetooth:

- Have your audio device (e.g., smartphone or tablet) and TrueMix 600 as close together as possible while trying to connect. Make sure both the audio device and TrueMix 600 are unobstructed by walls, furniture, etc.
- Reset the Bluetooth connection on TrueMix 600 to disconnect it from any other audio device and restart the search process. If this does not work right away, power off TrueMix 600 and then power it back on. See the section [\(4.2\) Operation > Connecting a Bluetooth Device](#) for more information.
- Reset the Bluetooth connection on your audio device by turning Bluetooth off and back on. You can usually find this under the Bluetooth menu in the Settings for your phone or other audio device.

If this does not work, and you have connected to TrueMix 600 before, find TrueMix 600 in the list of available or previously connected devices in your audio device's Bluetooth menu, tap the "gear" or "i" icon located next to it and then select **Unpair** or **Forget**. Turn TrueMix 600 off and back on and try pairing again once it reappears in your available devices list.

**Note:** If TrueMix 600 has been paired to another audio device recently that is still within range, you may need to repeat this process with that audio device to fully disconnect.

## (6.1) Technical Specifications

<b>Frequency Response</b>	All inputs: 20 Hz - 22 kHz ( $\pm 1$ dB)
<b>THD+N (Total Harmonic Distortion)</b>	All inputs: $\leq 0.05\%$ (@ 4 dBu, 1 kHz)
<b>Gain Range</b>	Mic inputs (Channels 1-2): 0 - +48 dB Line inputs (Channels 1-2): -15 - +33 dB Line inputs (Channels 3-4): -20 - +20 dB All inputs: +22 dBu max
<b>Max Voltage Gain</b>	67 dB (mic input to any output) 40 dB (line output to any output) 20 dB (2TK/USB/Bluetooth to any output)
<b>SNR (Signal-to-Noise ratio)</b>	All inputs: $\geq 110$ dBu
<b>Phantom Power</b>	+45 - +49V with switch control
<b>Impedance</b>	Mic inputs: 3.9 k $\Omega$ All other inputs: $\geq 10$ k $\Omega$ Aux outputs: 1 k $\Omega$ 2TK outputs: 1 k $\Omega$ All outputs: 120 $\Omega$
<b>Equalization</b>	High: $\pm 15$ dB @ 12 kHz Low: $\pm 15$ dB @ 80 Hz
<b>Bluetooth</b>	Profile: A2DP Module: Bluetooth 5.0 Operating Frequency: 2402 MHz - 2480 MHz Range: 100 ft. / 30.5 m
<b>USB Audio Interface</b>	Version: 2.0 Resolution: 16-bit DAC Sampling Rates: 32, 44.1, 48 kHz ADC Sampling Rates: 8, 11.025, 16, 22.05, 32, 44.1, 48 kHz
<b>Connectors</b>	(3) 1/4" (6.35 mm) TRS outputs (2) 1/4" (6.35 mm) TS outputs (6) 1/4" (6.35 mm) TRS stereo L/R inputs (2) 1/4" (6.35 mm) TRS headphone output (2) 1/4" (6.35 mm) TRS mono input (1) Standard RCA L/R input (1) Standard RCA L/R output (2) XLR inputs (1) USB type-B input (1) DC power input

<b>Controls</b>	(1) Power switch (10) volume control knobs (1 per input, 1 aux return, 1 2TK In, 2 headphone out, 1 Bluetooth, 1 Main Out) (4) Stereo pan control knobs (1 per input) (4) Aux volume control knobs (1 per input) (4) EQ Low control knobs (1 per input) (4) EQ Hi control knobs (1 per input) (4) Gain control knobs (1 per input) (3) Locking switch buttons (2 source select, 1 Bluetooth) (1) Horizontal sliding switch
<b>Indicators</b>	(1) Power LED (4) Peak LEDs (1) Phantom LED (16) Main Out Meter LEDs (1) Bluetooth LED
<b>Main Mix</b>	Main output: (2) 1/4" (6.35 mm) balanced TRS, +22 dBu max output 2TK output: (2) unbalanced RCA, +22 dBu max output Headphone output: (1) stereo 1/4" (6.35 mm) TRS, 170 mW @ 32 $\Omega$
<b>Power</b>	Connection: DC Voltage: 18V, 1A Consumption: 18W
<b>Dimensions</b> (width x depth x height)	8.9" x 8.5" x 2.9" 225.5 x 217 x 74 mm
<b>Weight</b>	3.2 lbs. 1.4 kg

Specifications are subject to change without notice. Bluetooth and wireless reception and range are affected by walls, obstructions, and movement. For optimal performance, place the product in the center of the room so it is unobstructed by walls, furniture, etc.

## **(6.2) Trademarks & Licenses**

Alto Professional is a trademark of inMusic Brands, Inc., registered in the U.S. and other countries. The *Bluetooth* word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Alto Professional is under license. macOS is a trademark of Apple Inc., registered in the U.S. and other countries. Windows is a registered trademark of Microsoft Corporation in the United States and other countries. All other product names, company names, trademarks, or trade names are those of their respective owners.

