

NEW-HANK

QUALITY AV PRODUCTS

INMATE/INMATE USB PROFESSIONAL 19" MIXER



User Guide and Reference Manual

INTRODUCTION

Welcome to the NEWHANK INMATE and INMATE USB professional 19" mixers series user manual. INMATE and INMATE USB both offer you plenty input– and output–mixing facilities in a compact 4u rack design. You can now connect and control a massive amount of audio (line) sources and up to 3 microphones. The Stereo– Master XLR and RCA, ZONE and RECORD & USB* outputs can be directly connected to your amplifiers, powered speakers, tape decks, computer* and so on. This manual describes how INMATE and IMATE USB can work for you.

By incorporating the latest surface mount technology and a "Green" switch mode power supply ; we did our best to create a reliable high–end / low noise audio mixer that will serve you well for many years to come.

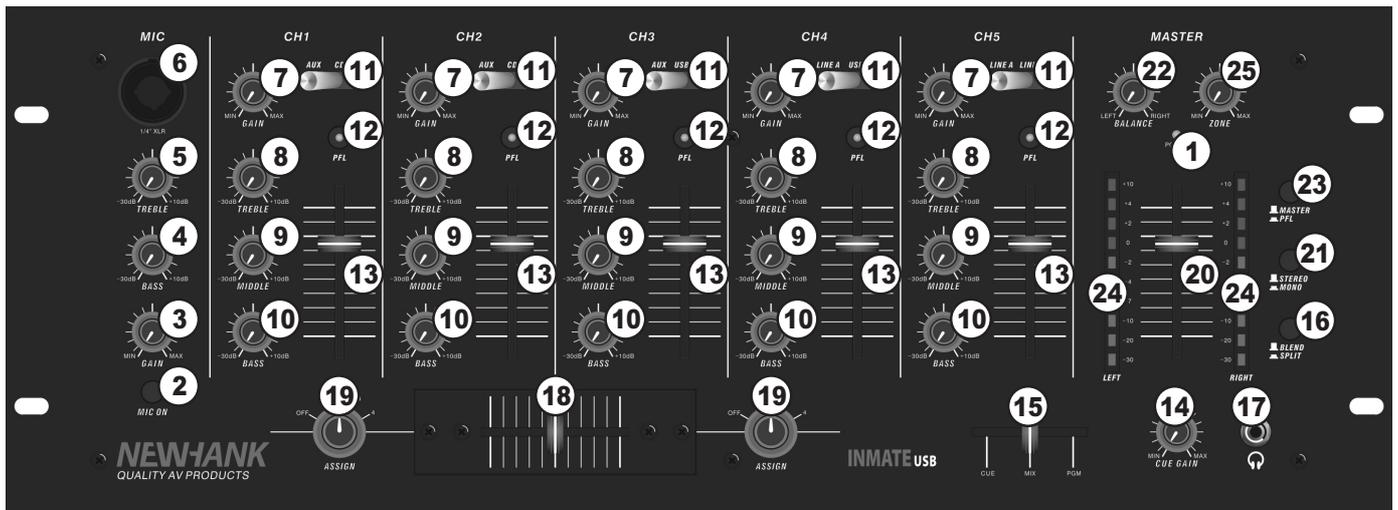
BASIC PRINCIPLES

1. Study the connection diagram on page 4.
2. Make sure all devices are turned off and all faders, zone and gain rotary's are set to "zero" .
3. Connect all your stereo input sources as indicated in the diagram on page 4.
4. Connect the stereo outputs to power amplifier(s), powered speakers and so on.
5. Plug all devices into AC power.
6. Always switch your system on in the following sequence:
 1. Audio input sources (like DVD– CD Players, Tuners etc).
 2. Mixer.
 3. Amplifiers, Powered speakers etc.Always switch your system off in reverse sequence:
 1. Amplifiers, Powered speakers etc.
 2. Mixer.
 3. Audio input sources (like DVD– CD Players, Tuners etc).

ADJUSTMENT

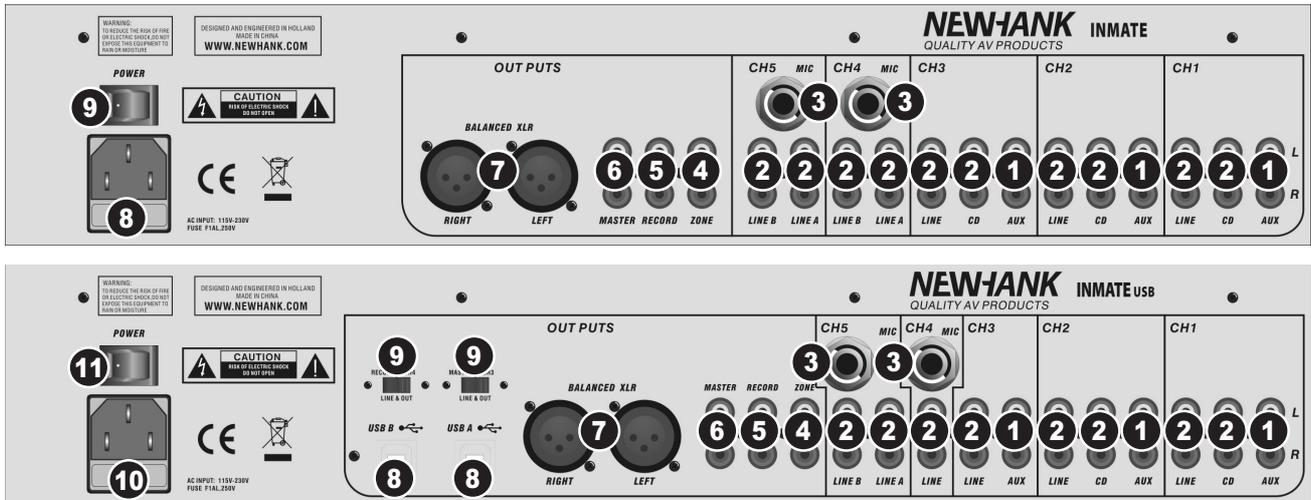
1. Select the Input source (11) and channel while your connected audio device is in playback mode.
2. Engage the Master/PFL (23).
3. While still keeping the channel, master and zone rotary's in "zero" position, now engage the "PFL" (12) of the corresponding channel.
4. Adjust the gain rotary till you see the input level in the blue area of the VU meter bar reading on average between – 7 and – 2 dB.
5. Adjust the channel fader to 75% open.
6. Finally adjust the master fader to the find the desired room level.
7. Repeat these steps for all line input channels.

FACE PANEL FUNCTIONS



1. **POWER LED** -- Illuminates in red when the mixer is powered on.
2. **MIC ON/OFF** -- Turns the dedicated microphone input on or off.
3. **MIC GAIN** -- Adjusts the audio level of the microphone signal.
4. **MIC BASS** -- Adjusts the low (bass) frequencies of the microphone channel.
5. **MIC TREBLE** -- Adjusts the high (treble) frequencies of the microphone channel.
6. **MIC INPUT** -- Connect a microphone to this COMBO input that accepts either an XLR or a 1/4" jack connector.
7. **CHANNEL GAIN** -- Adjusts the corresponding channel pre-fader and pre-EQ gain level.
8. **CHANNEL TREBLE** -- Adjusts the high (treble) frequencies of the audio on the corresponding channel.
9. **CHANNEL MID** -- Adjusts the mid-range frequencies of the audio on the corresponding channel.
10. **CHANNEL BASS** -- Adjusts the low (bass) frequencies of the audio on the corresponding channel.
11. **INPUT SELECTOR** -- Selects the input source to be routed to the corresponding channel. Input jacks are located on the rear panel.
12. **PFL** -- Sends pre-fader, post-EQ audio of the corresponding channel to the headphone monitoring section and also the VU meters when (23) is pressed.
13. **CHANNEL FADER** -- Adjusts the audio level on the corresponding channel.
14. **CUE GAIN** -- Adjusts the audio level of the headphones.
15. **CUE BLEND** -- Slide this to mix the Cue channel and Program mix in the headphones. When all the way to the left, only channels routed to the Cue channel will be heard. When all the way right, only the Program mix will be heard.
16. **BLEND / SPLIT** -- When pressed, this button sends all audio in the Cue channel to the left side of the headphones and the Program mix to the right side of the headphones. When raised, you may control the balance of the Cue channel and Program mix with the CUE BLEND fader.
17. **HEADPHONES** -- Connect your headphones to this output for cueing and mix monitoring.
18. **CROSSFADER** -- Blends audio between the channels assigned to the left and right side of the crossfader. This part is user replaceable, Part-number CF-1.
19. **CROSSFADER ASSIGN** -- Enables you to route 1 of 4 channels via the crossfader. Now you can use 1 fader to simply mix 2 channels.
20. **MASTER FADER** -- adjusts the main master output volume.
21. **STEREO / MONO** -- When pressed your main master output will be MONO.
22. **BALANCE** -- Adjusts your left to right balance on both the RCA and XLR Master outputs.
23. **MASTER/PFL** -- When pressed you see the pre fader cue signal(s) on the VU Meters. When raised you see the post fader Master program signal on the VU Meters.
24. **LED VU Meters** -- can indicate either the master output or cue channel input levels, depending on the position of the MASTER/PFL switch (23).
25. **ZONE** -- Is a second and adjustable stereo Master program output.
This control can be used to adjust the audio feed to an extra amplifier, powered monitors or lighting console etc.

REAR PANEL CONNECTIONS



1. **AUX INPUTS (RCA)** -- CD, DVD- players, Tape Decks and other line level devices may be connected to these jacks. The red colored RCA jack represents the right channel input and the white represents the left channel input.
2. **LINE INPUTS (RCA)**--CD, DVD players, Tape Decks and other line level devices may be connected to these inputs.
3. **MIC INPUTS** -- Connect microphones to these inputs.
4. **ZONE OUTPUT (RCA)** -- Connect this output to an extra amplifier, powered monitors or a lighting console.
5. **RECORD OUTPUT (RCA)** -- Use standard RCA cables to connect this output to a recording device. The level of this output is based upon pre-master levels.
6. **MASTER OUTPUT (RCA)** -- Use standard RCA cables to connect this output to a speaker or amplifier system. The level of this output is controlled by the MASTER fader on the face panel.
7. **MASTER OUTPUT (BALANCED)** -- Use XLR cables to connect this output to a speaker or amplifier system. The level of this output is controlled by the Master fader on the face panel.
8. * **USB** -- These USB connections send and receive audio from a connected computer. The functionality of each port (send or receive) depends on the position of the corresponding USB SELECT switch.
9. * **USB SELECT** -- These switches determine the functionality of the USB ports.
 - USB A switch set to MASTER sends the program Mix output to your computer.
 - USB A switch set to CH3, sends audio from your computer to CH3 input.
 - USB B switch set to REC send the record output to your computer.
 - USB B switch set to CH4, send audio from your computer to CH4 input.
- 8(10). **POWER IN** -- Use the included power cable to connect the mixer to a power outlet.
- 9(11). **POWER SWITCH** -- Turns the mixer on and off.

USB OPERATION*

The **INMATE USB** is equipped with two USB ports that allow you to play content from your computer through the mixer, or record audio from the mixer directly into your favorite software application. The USB interface on your mixer works with your computer just like a standard USB “plug and play” sound card.

WINDOWS CONFIGURATION*

1. Turn on your computer and the INMATEUSB.
2. Use a USB cable to connect one or both ports of the INMATEUSB to your computer.
3. Windows will immediately recognize the mixer as a "USB Audio Device" or "USB Audio CODEC" and will automatically install any required system components.

To change system audio preferences in Windows, you will need to access the Sounds and Audio Devices properties, located in the Control Panel.

The first time you connect the Mixer to your computer, the mixer will be automatically assigned as the default or "preferred" device for sound playback on your computer. All of your computer's sounds will be now sent to the mixer channel indicated above the USB connection.

Note: If you have connected both USB ports to your computer, the ports will be numbered in the order they were connected. For example, if you connected USB A before USB B, USB A will appear as "USB Audio CODEC" and USB B will appear as "USB audio CODEC (2)".

- To send audio from your computer into the INMATE USB, select "USB Audio CODEC" in the Sound Playback field. This allows you to play audio from your computer into one of the mixer channels, depending on which USB port is used to make the connection.
- To send audio from the INMATE USB to your computer, select "USB Audio CODEC" in the Sound Recording field. This allows you to record your mix into your computer.



Note: If your sound playback or recording application does not have its own audio input and output settings (for example, Windows Sound Recorder, Windows Media Player or Apple iTunes), it will use the devices set in Sounds and Audio Devices. Please note that these settings are loaded upon application startup, so if you change device settings while the application is open, you will need to restart your application for the settings to take effect.

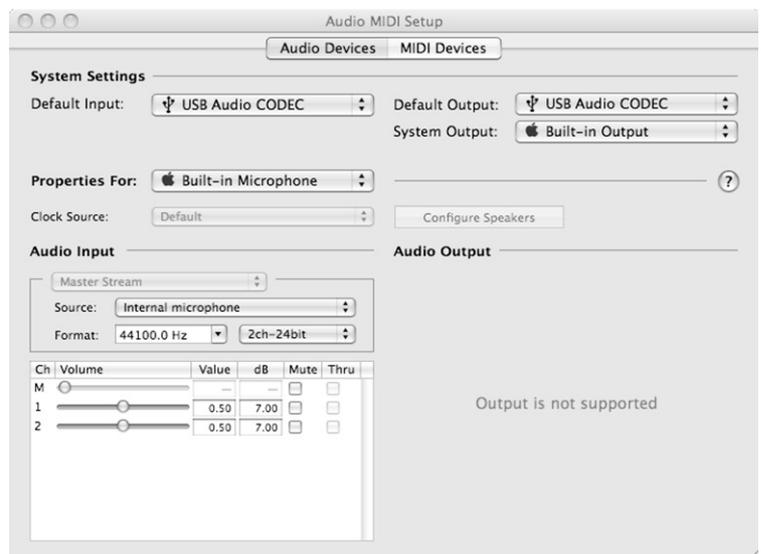
Tip: To prevent Windows from playing system sounds (beeps and bleeps) through the INMATE USB, we highly recommend disabling these by clicking on the Sounds tab and selecting No Sounds from the pull-down menu.

MAC CONFIGURATION*

1. Turn on your computer and the INMATEUSB.
2. Use a USB cable to connect one (or both) ports of the INMATEUSB to your computer.
3. Windows will immediately recognize the mixer as a "USB Audio Device" or "USB Audio CODEC"

To change system audio preferences on a Mac, you will need to access the Audio MIDI Setup preferences located in Applications X Utilities.

Note: If you have connected both USB ports to your computer, the ports will be numbered in the order they were connected. For example, if you connected USB A before USB B, USB A will appear as "USB Audio CODEC" and USB B will appear as "USB Audio CODEC (2)"



- To send audio from your computer into the INMATE USB, select USB Audio CODEC in the default output field. This allows you to play audio from your computer into one of either of the mixer channels, depending on which USB port is used to make the connection.
- To send audio from the INMATE USB to your Mac, select "USB Audio CODEC" in the default Input field. This allows you to record your mix into your Mac.

If your sound playback or recording application does not have its own audio input and output settings (for example, Apple iTunes), it will use the devices set in Audio MIDI Setup. Please note that these settings are loaded upon application startup, so if you change device settings while the application is open, you will need to restart your application for the settings to take effect.

USING BOTH USB PORTS SIMULTANEOUSLY*

Since the INMATE USB has 2 USB ports, you can attach a different computer to each USB jack or you can connect both jacks to a single computer. Each USB jack on the mixer will appear as a separate USB audio device to your computer. You can play two audio files simultaneously from one computer and send both of those audio streams to separate channels of your mixer by using two USB cables. If you do this, we suggest using one of the many commercially available software programs that support multiple sound cards. However, if you don't have software like that, you can use two separate software media players instead. To do this you need to start the first media player and then change the Preferred Audio Device to the second USB port, then start your second media player.

TROUBLESHOOTING*

Problem: The computer did not recognize my mixer.

- The mixer is not turned on. Turn on your mixer.
- The USB cable is not connected. Connect the USB cable to your computer and mixer.
- You have already installed a USB Audio Device before. In that case, your mixer should work without any installation process. Just plug it in. You may have to change your computers Default Sound Playback Device.

Problem: The recording quality is poor.

- The bit and sample rate are not set to CD-quality in your recording software. Change the bit rate to 16-bit and sample rate to 44.1kHz for CD-quality results.
- The audio is distorting. Turn down the gain on your mixer to reduce the audio level.
- The audio level is too low. Increase the level until you see activity on the VU meters.

Problem: I'm trying to play one song into channel 3 and the other into channel 4, but they both get mixed together into only one channel.

- The Sound Playback Device was not set properly for one of your audio applications. Close one of the playback applications, then change your preferred sound playback device as described above, then re-open the application. Note that this technique will not work with all media players (for example, Real Player).
- Use a dedicated audio program that supports 2 sound cards.

Problem: The sound is coming out of my computer speakers instead of going to my mixer.

- The Sound Playback Device was not properly set. Close your audio playback application, then change your Preferred Sound Playback Device as described above, then re-open the application.

Problem: My computer's system sounds (beeps and bells) are going into my mixer.

- The Sound Playback Device is still set to your mixer. Change the Preferred Sound Playback Device as described above.
- Silence your computer's system sounds altogether by doing the following: Select Sounds and Audio Devices in the Control Panel and switch to the Sounds tab. Under Sound Scheme, Choose the No Sounds option and click OK.
- If you have a Mac, you didn't select Play alerts and sound effects through Internal Speakers. See the Mac setup section for how to do this.

* ONLY FOR INMATE USB

SPECIFICATIONS

Installation:	Place on flat surface or mount in 19" rack.
Power supply:	Single Voltage switch power AC 115-230V-50Hz.
Power consumption:	12W typical, 21W w/ full headphone output.
Operating Temperature:	5 to 35 deg. CC; Humidity: 25 to 85% RH. (Non-condensing); Storage Temperature: -20 to 60 deg. C
Dimensions:	19" 4he Rack mount, Front: 483x177MM Rear: 434x160MM
Depth:	810MM (including rubber feet 850MM).

Please Note: All specifications and improvements to and in the design of this unit and its manuals are subject to change at any time without any prior written or published notice.

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