

# hear back PRO

## PERSONAL MONITOR MIXER SYSTEM



SCAN  
CODE  
FOR USER  
GUIDE

### Virtual Mixer Card

#### OVERVIEW

Virtual Mixer I/O Card for the HB PRO Hub boasts all the features of the HB PRO Mixer slimmed down into a card format. Control via the new Hear Back PRO iOS app or from another PRO Mixer. Perfect for wireless in-ear monitor systems, you can mix up to 128 channels of high quality audio with 4 presets and intercom. Features an auxiliary 1/8" Stereo Unbalanced Audio Input and XLR Balanced Left and Right outputs. Also works great for receiving or sending intercom audio in a studio control room.

#### INSTALLATION

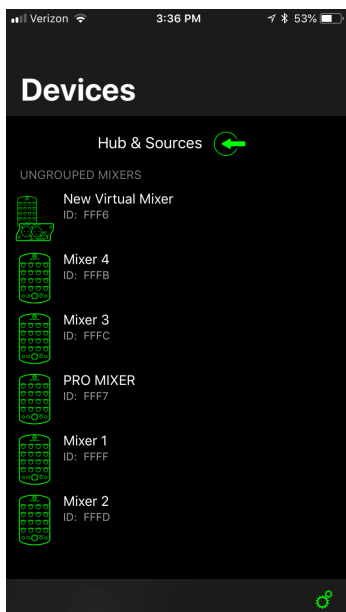
The Virtual Mixer Card may be installed in any open slot on the PRO Hub. With power disconnected, install the Virtual Mixer Card carefully – some of the components on the bottom side of the board barely clear the chassis lip. Push to seat the gold fingers into the front card edge connector, then tighten the thumbscrews.

#### CONTROL

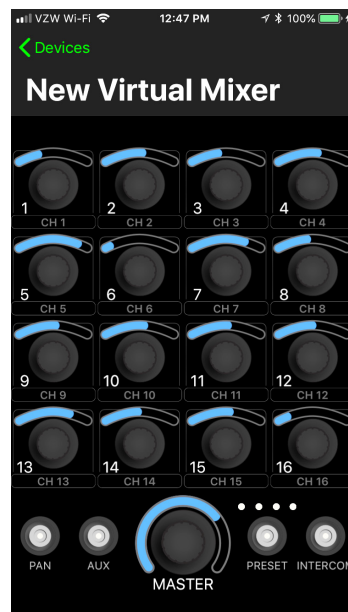
The Virtual Mixer Card can be controlled via the iOS App or another physical PRO Mixer.

#### OPTION 1: CONTROL VIA iOS APP

1. To control the Virtual Mixer Card from an iOS device, connect your Hear Back PRO Hub's 'HBUS IN' port to a gigabit LAN port on a gigabit wireless router with a standard Ethernet cable.
2. Download the **Hear Back PRO** iOS app from the App Store, and connect your phone or tablet to the same wireless network as your Hear Back PRO Hub. Open the app, and your Virtual Mixer Card will appear in the list (screen A). If you have additional PRO Mixers connected to your PRO Hub, they will appear in the list as well. Selecting the Virtual Mixer Card from the list will display the Mixer interface, giving you access to individual channel controls (screen B).



A - Devices Screen



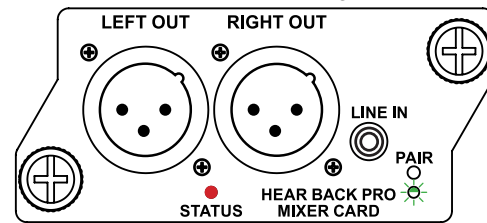
B - Mixer Interface

#### OPTION 2: CONTROL VIA ANOTHER PRO MIXER

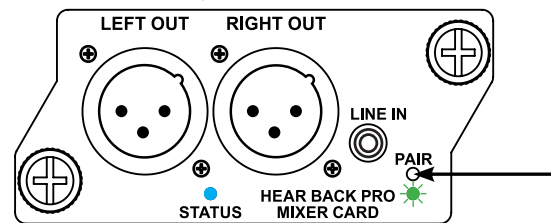
The Virtual Mixer Card can be controlled with another PRO Mixer by A) pairing via the PAIR button or B) pairing via the iOS App.

#### A. PAIRING VIA "PAIR" BUTTON

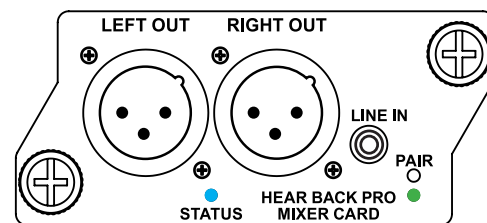
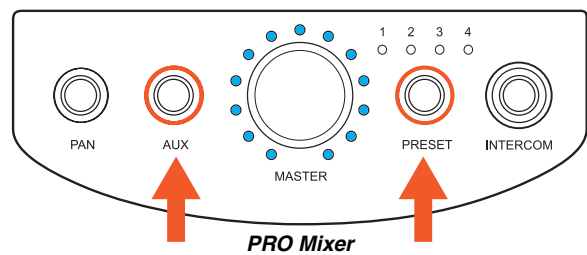
1. Apply power to Hub. The STATUS LED on the Virtual Mixer Card will illuminate **red**, and then the PAIR LED will flash **green** several times before stopping.



2. Using a micro screwdriver, toothpick, or tweaker, press the recessed PAIR button above the **green** LED. Hold it in until the LED flashes quickly, then release.



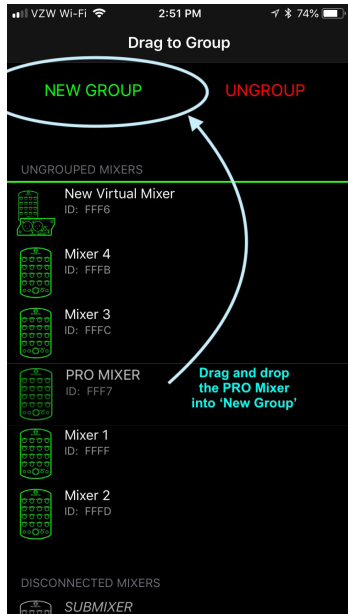
3. After a few seconds, the LED will begin to flash slowly. It is now ready to be paired with a PRO mixer.
4. Select the PRO Mixer you wish to pair with the Virtual Mixer Card. On that Mixer, press AUX and PRESET at the same time. You will see all the channels and master LED rings flash simultaneously, letting you know it has paired with the Virtual Mixer Card. The pairing LED on the card will go solid **green**.



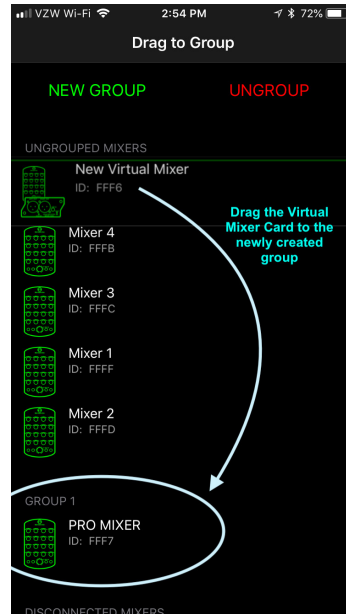
Virtual Mixer Card Status 'Blue' and Pairing LED 'Green'

## B. PAIRING VIA iOS APP

1. To pair a PRO Mixer to your Virtual Mixer Card via the app, ensure your list displays both devices. Long-press the PRO Mixer that you would like to pair until the item 'pops out', indicating you can drag and drop the item. Drag and drop the device to the 'New Group' option displayed at the top of the list (screen C). This will create a new Group number and place the PRO Mixer in that group.
2. Now, long-press the Virtual Mixer Card in the list, then drag and drop the device into the same group as the PRO Mixer (screen D). Controlling the PRO Mixer (either physically or via the app) will now also control the mix on the Virtual Mixer Card.



C - Creating New Group



D - Pairing Mixers

### Hear Back PRO iOS App

Download on the  
App Store

Scan code to download from iTunes or Search App Store for "Hear Back PRO"

## RECEIVING INTERCOM AUDIO IN THE CONTROL ROOM

1. Pair the Virtual Mixer Card to a PRO Mixer. Once paired, ensure all channel volume levels are turned down.
2. Press and hold the INTERCOM button on the paired Mixer to test and adjust talk back volume with other users. Adjust the INTERCOM Volume (Master Knob) to the desired level. The Virtual Mixer Card will retain the volume level of the last Mixer it was paired with or the latest level setting in the iOS app.
3. Optionally, you can unpair the Virtual Mixer Card from the physical Mixer. On the paired Mixer, press AUX and PRESET at the same time while turning the Master Volume knob in any direction.
4. Connect the **LEFT OUT** (balanced), located on the Virtual Mixer Card, to an unused input on console.

## SENDING TALK BACK FROM THE CONTROL ROOM

1. With a mic connected to the console, connect an output on the console to the 1/8" LINE IN AUX on the Virtual Mixer Card.
2. The INTERCOM can be triggered either via the iOS App or by using our optional PRO Intercom Footswitch in-line with the microphone.

## TECHNICAL SPECIFICATIONS

### Aux Input

Line Input Config/Impedance: 1/8" Stereo, unbalanced, 10K ohms typical  
Line Input Level: 0 dBu optimal, +18 dBu max

### Line Output

Max Output Level: +24 dBu  
Frequency Response: 20 Hz to 20 KHz, +/-0.2 dBu  
THD+N: 0.004% typical at 1 KHz, +15 dBu  
0.006% typical, 20 Hz – 20 KHz, +4 dBu  
Inter Modulation Distortion: 0.004% typical at +4 dBu, 60 Hz/7 KHz  
Crosstalk: < -133 dBu @ 1 KHz  
Propagation Delay:  
Digital input to Analog Input < 0.092 mSec @ 192 kHz sample rate  
Analog input to Analog Input < 0.248 mSec @ 192 kHz sample rate

NOTE: The PRO Hub must have **Firmware Version 2.7 or above** for the Virtual Mixer Card and the iOS App to work. Firmware Updates files are available for download at [www.heartechnologies.com.com](http://www.heartechnologies.com.com) > Support. Scroll to the "Downloads" section and look for "Firmware Updates" under "Hear Back PRO."

NOTE: To pair the Virtual Mixer Card with a PRO Mixer, the **Mixer Firmware Version must be 2.17 or above.**

**If your version is lower than this, contact our Tech support. If your version is 2.17 or higher, the Mixers can be updated via the iOS App.** To check your firmware version, hold the PRESET button on the PRO mixer, then apply power. Keep holding until the pan, aux and intercom buttons are flashing, then let go. The **blue** master LED ring will show the version, i.e. #2 LED lit is version "2". A channel LED ring will show the sub of that version. So if the second master LED is lit and channel 9 is lit in **blue**, you have version 2.9. If the channel LED's are **green**, then your version is that channel number plus 16. So, if channel 1 is **green**, you have version 2.17.



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