

# hear back PRO

## PERSONAL MONITOR MIXER SYSTEM



SCAN FOR  
DOWNLOADS

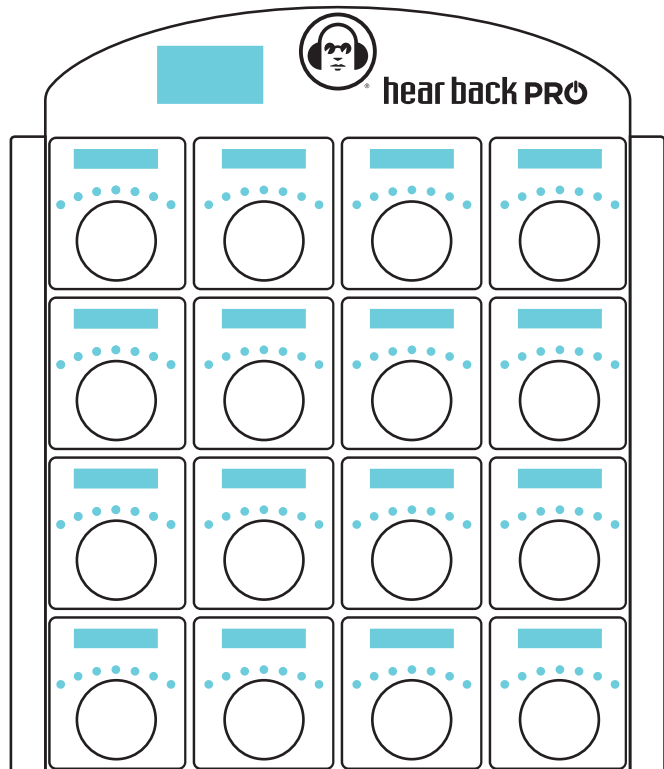
### PRO Digital Overlay

#### OVERVIEW

The PRO Digital Overlay is an ultra-thin faceplate for electronic labeling of a Hear Back PRO Mixer. This attachable upgrade modifies and expands the display of channels and mixer functions through high contrast OLED graphical displays. The Digital Overlay permanently mounts directly onto the PRO Mixer's face and connects via a ribbon cable into the Mixer's side expansion slot. The naming functions can be accessed and updated through the iOS app or via a computer, for added flexibility. The PRO Digital Overlay is a time saving and easy to read solution to the standard scribble strip for engineers and end users in studio sessions and live entertainment settings.

#### ADVANTAGES / FEATURES

- Unobtrusive with a thin, ultra-low profile (less than 3mm thickness)
- Rugged design for stage and touring
- Easy and quick installation
- Supports the use of letters, numbers, and symbols when labeling channels and mixers
- Bright and easily legible OLED screens allow for quick identification and control, even in low light environments
- Mixers and channels can be named and updated remotely with either the Hear Back PRO iOS app or via a computer



OLED graphical displays for electronic labeling and Mixer status

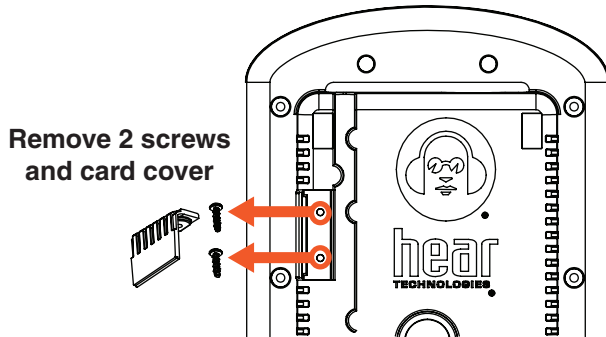
#### A FEW NOTES BEFORE INSTALLATION

- Though the PRO Digital Overlay is rugged once installed onto the Mixer, DO NOT BEND OR TWIST THE OVERLAY, prior to or during the installation process.
- Take care when handling the ribbon cable during the installation process. Creasing or twisting the cable can affect performance of the Overlay.
- The PRO Digital Overlay is designed to be used with V6.1 firmware. Prior to use, the Hear Back PRO Hub firmware must be updated to a minimum version of 6.1 with bootloader version 2.5 or higher. The PRO Mixer requires a minimum firmware version of 6.1 with bootloader version 2.24 or higher. These software updates are available for download at: [www.HearTechnologies.com](http://www.HearTechnologies.com) > Support

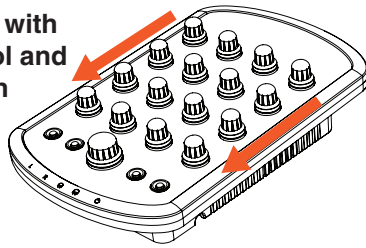
## INSTALLATION

**NOTE: Once mounted, the PRO Digital Overlay cannot be removed.** Take adequate care when aligning and applying to the PRO Mixer front.

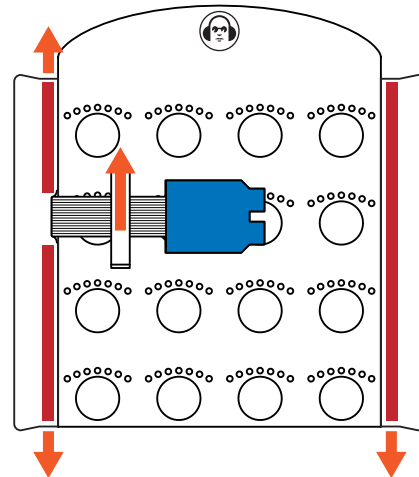
1. Remove the two screws attaching the expansion card slot cover to the Mixer. Keep screws for reuse.
2. Clean Mixer top edges with isopropyl alcohol and a lint-free cloth (do not saturate).



Clean top edges with isopropyl alcohol and lint-free cloth

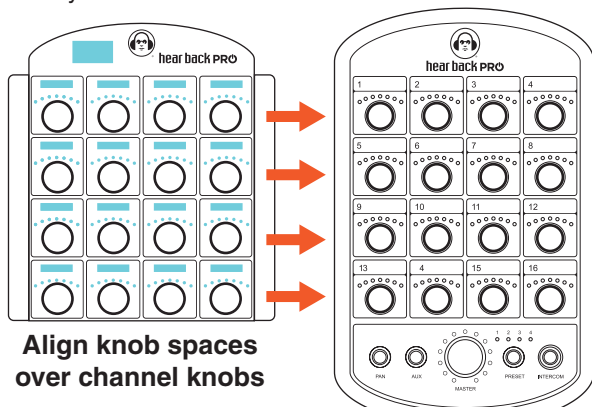


3. With the Overlay face-down, CAREFULLY remove the tape securing the flexible ribbon cable to the bottom of the Overlay. Gently pull the tabbed end of the tape while applying pressure to the opposite end.
4. On the left and right sides of the Overlay, peel the red release liner off the double-sided mounting tape.

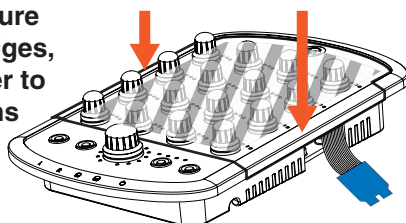


Remove tape from ribbon cable and red release liner from sides

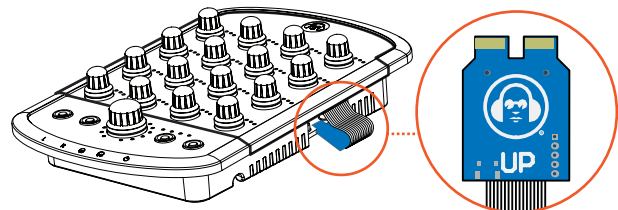
5. Align Digital Overlay above PRO Mixer so the knob spaces are centered over the corresponding knobs.
6. Press Digital Overlay firmly onto Mixer faceplate along the side edges. DO NOT apply pressure to any screens.



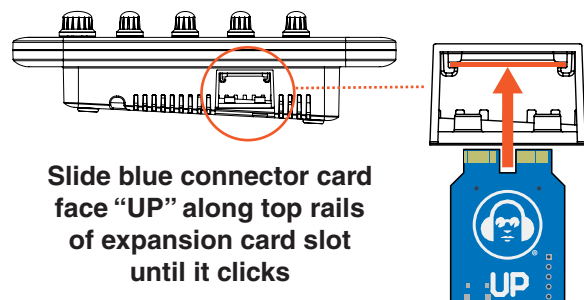
Apply pressure along side edges, NOT in center to any screens



7. Gently curving the flexible ribbon cable, turn the blue connector card towards the expansion slot and align with top rails. (DO NOT TWIST OR CREASE the ribbon cable).
8. Slide connector card face "UP" firmly into the top rails of the expansion slot until it clicks.



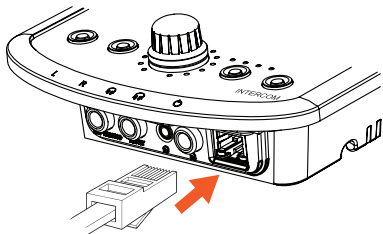
**WARNING! DO NOT TWIST OR CREASE flexible ribbon cable**



## INITIAL SETUP

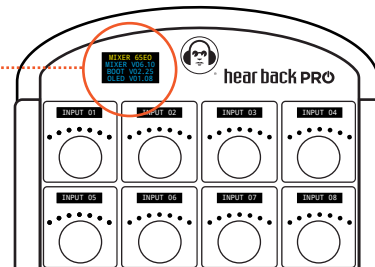
**NOTE:** If not already installed, update the Hear Back PRO Hub to a minimum firmware version of 6.1 with bootloader 2.5 or higher, and PRO Mixer to a minimum firmware version 6.1 with bootloader 2.24 or higher via the iOS app or Desktop FW Updater.

1. Apply power to the Mixer by inserting the network cable into the Ethernet port.

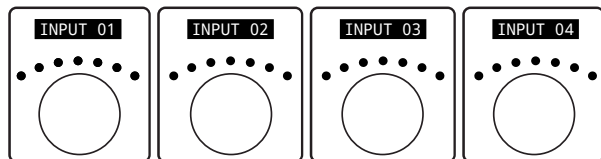


2. Following the bootup sequence, the main screen at the top left of the Digital Overlay will display the Mixer's firmware, bootloader, and overlay version.

MIXER 65E0  
MIXER V06.10  
BOOT V02.25  
OLED V01.08

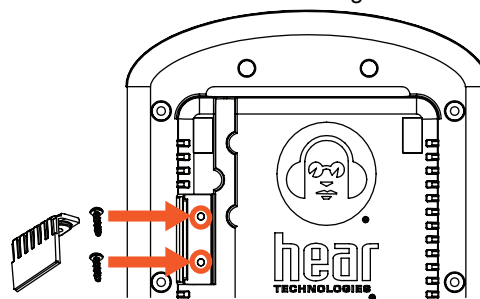


3. Each screen above the 16 knobs will illuminate and display either the default channel numbers (INPUT 01, INPUT 02, etc.), or the channel names stored in the V6 PRO Hub.



Default Channel Labels

4. Attach the new expansion card slot cover, supplied with the PRO Digital Overlay, using the original screws that were removed during installation.



## CHANNEL NAMING

Channel names can be created and updated instantaneously via the Hear Back PRO iOS app or the Desktop Config Editor using a Windows computer connected to the PRO Hub. The Hub's configuration file can also be edited directly via any computer. These custom labels are stored remotely on the PRO Hub, allowing each Mixer to import the names when routing is beyond the standard 16 channel 1:1. Channel names will display in UPPERCASE.

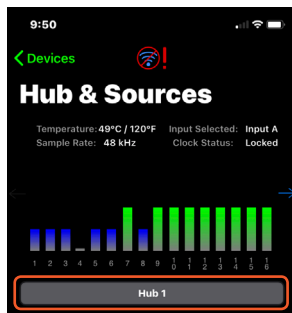
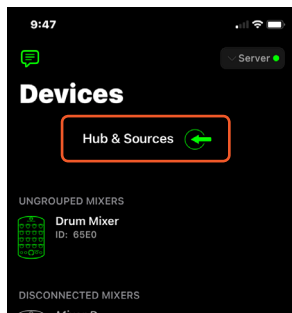
### Using the Hear Back PRO iOS App

1. Open the mobile app available from the App Store:  
**Hear Back PRO**

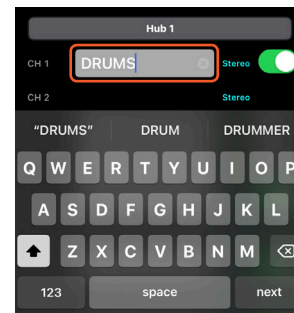
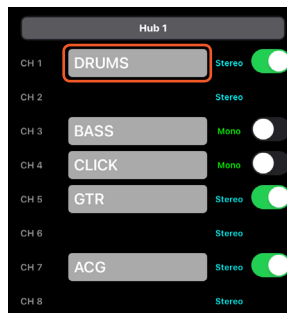


Hear Back PRO  
Hear Technologies  
★★★★★ 5.0 + 3 Ratings  
Free

2. Select "Hub & Sources" > Select the desired Hub (e.g. HUB 1) from the list beneath the level meters.

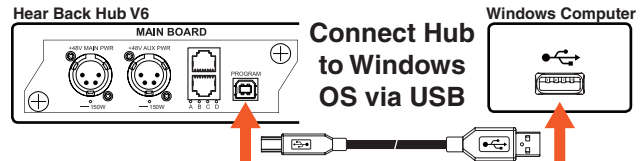


3. Scroll to the desired channel number to be updated from the 32 available channels > Select the associated gray box to the right of the "CH #".
4. A keyboard will appear > Edit the name of the channel using any combination of letters, numbers, or available symbols, up to 9 characters in length.
5. Tap outside of the gray box to "Save".

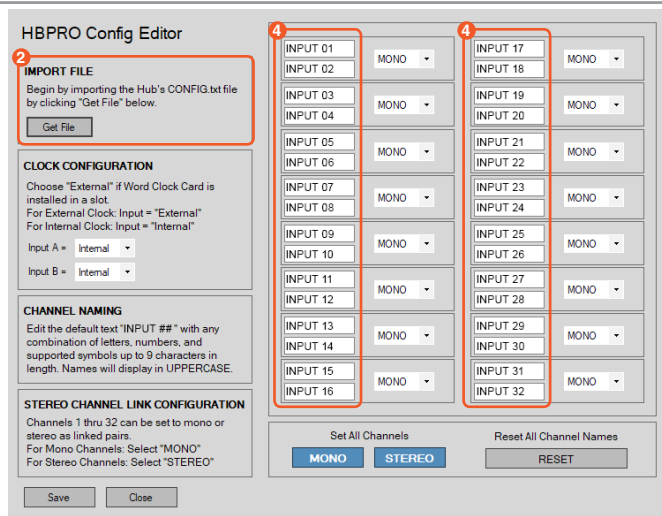


## Using the Desktop Config Editor

1. With the PRO Hub “ON”, plug a USB (B-Male) into the “PROGRAM” port on the Hub’s Main Board and the USB (A-Male) into a computer USB port.

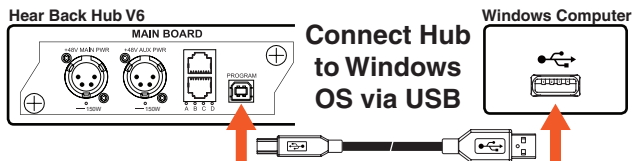


2. Open HBPRO Config Editor > Click on “Get File”
3. Locate the Hear Back PRO drive in My Computer (PC) or on your desktop (Mac) > Select the “CONFIG.TXT” file > Click “Open”
4. Edit channel names with any combination of letters, numbers, and supported symbols up to 9 characters. Names will display in UPPERCASE.  
*NOTE: Clock configuration and stereo linking settings can also be edited.*
5. Click “Save” > Select Hear Back PRO drive as location
6. Click “Save” > Select “Yes” to replace existing CONFIG.TXT file
7. Click “Ok” (File Saved) > Close HBPRO Config Editor

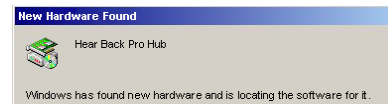


## Editing the Hub’s CONFIG.TXT File Directly

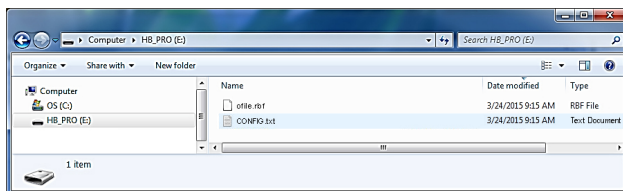
1. With the PRO Hub “ON”, plug a USB (B-Male) into the “PROGRAM” port on the Hub’s Main Board and the USB (A-Male) into a computer USB port.



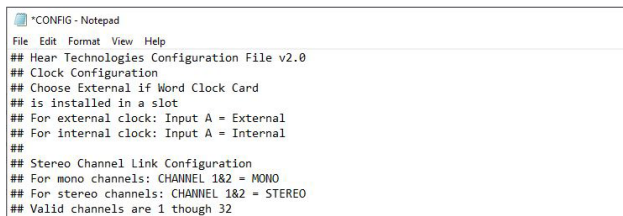
2. If using Windows OS, a window should pop up notifying you new hardware was found named “Hear Back Pro Hub”. If using Mac OS, a new drive will appear on your desktop named “HB\_PRO”.



3. Open the drive and view the files. On a PC, locate the drive in My Computer. On Mac, open the drive on your Desktop or by opening Finder.



4. Open the “CONFIG.TXT” file > Listed are the PRO Hub’s clock settings for input A/B, the mono/stereo assignments for each channel, and the channel name for each of the 32 channels stored.



5. Scroll down to the section that lists the “CH # Name =” and find the channel to be edited.
6. Delete and replace the text following “CH # Name =” with any combination of letters, numbers, or available symbols, up to 9 characters in length.



7. After completing all edits, click “Save”
8. Select “Hear Back PRO Hub” as location.
9. Click “Yes” to replace existing CONFIG.TXT file.
10. Click “Ok”. File is saved.
11. Click “Close”. Channel names are updated on the Mixer.

*NOTE: Channel names will not update until the CONFIG.TXT file has been both SAVED and CLOSED.*

## MIXER NAMING

PRO Mixers can be named for easier identification via the iOS app. Mixer names will display UPPERCASE in the main screen of the PRO Digital Overlay and within the mobile app. Mixer naming is saved only on the Mixer, *not on the Hub*.

1. Open the **Hear Back PRO** iOS app > From the “Devices” menu, select the Mixer to be named.
2. Click on the “Edit” icon next to the Mixer’s name.



3. Enter a custom name for the Mixer in the dialog box up to 12 characters in length > Click “Done” to exit.



4. The “name” will update both in the mobile app and on the Mixer being controlled.

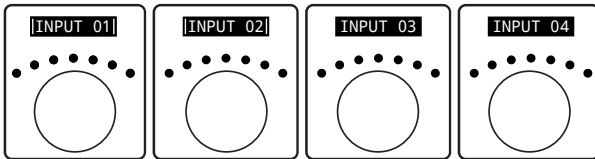
Supported Characters	0-9	#	(	-	<
	A-Z	\$	)	.	=
	space	%	*	/	>
	!	&	+	:	?
	”	,	,	;	@

## CHANNEL SCREEN DISPLAY

Each screen above the 16 knobs displays either the default channel numbers (INPUT 01, INPUT 02, etc.), or the channel names stored in the V6 PRO Hub.

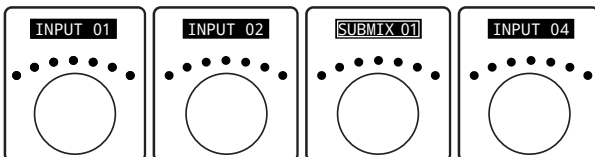
### STEREO LINKS

When two adjacent channels are stereo linked, the vertical bar icon “|” will appear on both sides of the channel name (e.g. INPUT 01 and INPUT 02). These paired channels can be named independently while being controlled simultaneously. The iOS app however assigns one name to the stereo pair and saves the name of second channel to be restored when the stereo pair is removed.



### SUBMIXES

Submixes are identified by a rectangular box around the name in the channel screen above any of the Mixer’s 16 channel knobs (e.g. SUBMIX 01).



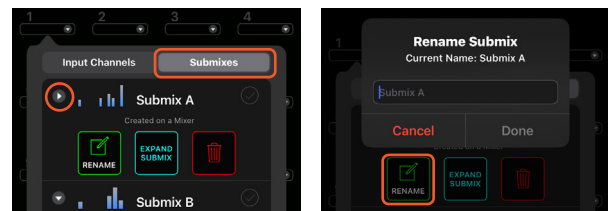
Submix names can be edited by using the **Hear Back PRO** iOS app.

### Naming a Submix via iOS App:

1. Open the **Hear Back PRO** iOS app > Under the “Devices” menu, tap on the Mixer in which a Submix is to be named.
2. Select the dropdown arrow of the channel that contains or will contain the submix. A dialog box will appear highlighting selectable input channels.



3. Tap “Submixes” at the top right corner of dialog box > Select the drop down arrow located next to the submix that is to be renamed to expand the available options.



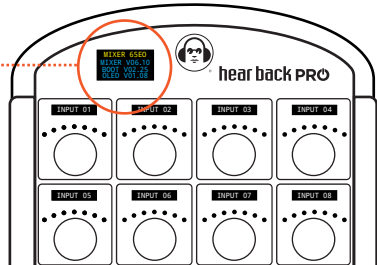
4. Select “Rename” to open a new dialog box > Type a name for the submix > Select “Done” to save.
5. The channel screen will automatically update with the submix name on the channel knob selected.

## MAIN SCREEN DISPLAY

The main screen at the top left of the Digital Overlay displays the Mixer's name and status including firmware version, channel levels, mode status, preset function, and text messages.

### FIRMWARE DISPLAY

Each time a Mixer equipped with the PRO Digital Overlay completes its power up cycle, the main screen will display the current Mixer firmware and boot version, as well as the current Mixer overlay version.

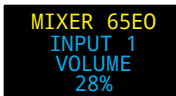


### CHANNEL KNOB ADJUSTMENTS

In addition to the seven LED indicators above each channel knob, levels are tracked and the exact value is displayed by the main screen. The main screen will display "Volume Mode", "Pan Mode", and "Stereo Width Mode" statuses. After adjusting, the main screen will continue to display the channel name and current set value for approximately 4 seconds or until another channel is adjusted.

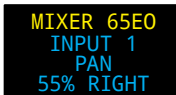
### VOLUME MODE

When making adjustments to one of the 16 channel knobs, the respective channel name will appear in the main screen as well as its current adjusted value as a percentage from 0-100%.



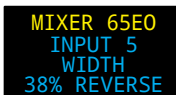
### PAN MODE

When making adjustments while in "Pan Mode" mode, the respective channel name will appear in the main screen, with the pan value in percentage, as well as, the pan direction as "% Left", "Center", or "% Right".



### STEREO WIDTH MODE

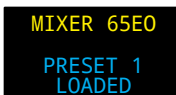
When stereo-linked channels are present, current stereo width settings are displayed as "% Wide", "Mono", and "% Reverse".



### PRESETS

The following preset functions are displayed in the main screen:

- "PRESET # LOADED" - displays which preset is selected
- "PRESET # SAVED" - displays when a current preset is being stored or overwritten
- "PRESET ERASED" - if a preset is zeroed out by holding the PAN and AUX buttons simultaneously



## GROUPED MIXERS

When Mixers are linked together, the first Mixer in the group defaults as the master Mixer, and each concurrent Mixer in the group becomes a slave Mixer. Each slave Mixer in a group will display "REMOTE CONTROL" in the main screen to signify it is functioning in a group.



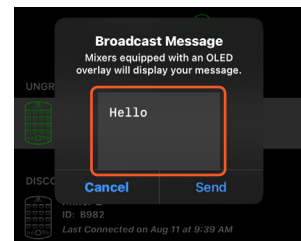
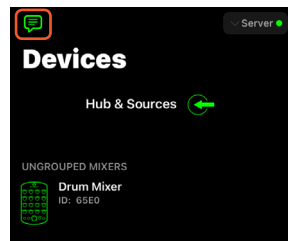
## TEXT MESSAGES

The PRO Digital Overlay also displays text messages in the main screen. This allows the engineer to communicate with players without using the intercom feature. After a message is sent, it will continue to flash on the main screen until the Mixer is adjusted (e.g. touch a knob, press a button). Text messages can be sent from the Hear Back PRO iOS app to all the Mixers in a session or to specific individual Mixers equipped with a PRO Digital Overlay.



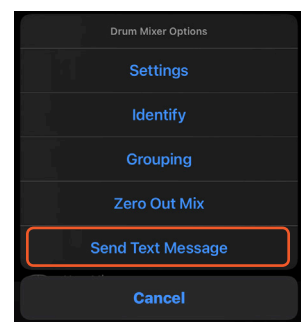
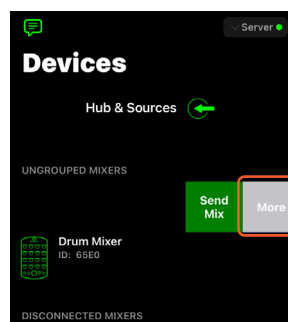
### Send a Text Message to All Mixers in a Session:

1. Open the **Hear Back PRO** iOS app > Select the "Devices" menu
2. Click on the text message icon > A dialog box will open.
3. Type a short text message (up to 36 characters) > Select "Send" > The message will appear and begin flashing on each of the Mixers' main screens.



### Send a Text Message to a Specific Mixer:

1. Open the **Hear Back PRO** iOS app > Select the "Devices" menu
2. Swipe left on the Mixer to receive a message.
3. Select the "More" button to view additional functions.
4. Select "Send Text Message" from the drop down menu > A dialog box will open.
5. Type a short text message (up to 36 characters) > Select "Send" > The message will appear and begin flashing only on that specific Mixer's screen.



## TECHNICAL SPECIFICATIONS

Compatibility:	Hear Back PRO Mixer V6
Mixer Minimum Firmware:	V6.1 with bootloader 2.24 or higher
Hub Minimum Firmware:	V6.1 with bootloader 2.5 or higher
Screen Dimensions:	Main Screen: 128 x 64 pixels Channel Screen: 96 x 16 pixels
Screen Character Limit:	Main Screen: 4 lines of 12 characters each Channel Screen: 1 line of 9 characters
Control:	Channels names edited via mobile app or desktop editor of file on PRO Hub via USB
Size:	15.72 cm W x 17.15 cm H x .27 mm D
Unit Weight:	0.14 lbs
Mounting:	3M very high bond (VHB) double-sided tape
Power:	Supplied by PRO Mixer through connected ribbon cable into expansion card slot

## TROUBLESHOOTING AND OPERATING TIPS

Mixer power is on, but Overlay's OLED screens don't light up	<ul style="list-style-type: none"> <li>Remove the blue connector card at the end of the flexible ribbon cable and reinsert into the Mixer's side expansion slot firmly until it clicks.</li> <li>Ensure the connector is aligned straight inside the rails during installation. <ul style="list-style-type: none"> <li>If the connector has been installed at an angle, the Digital Overlay will not function properly.</li> </ul> </li> <li>By default if connected properly, the main screen located to the left of the logo should display "PRO Overlay".</li> </ul>
Channel screens do not display names	<ul style="list-style-type: none"> <li>Overlay should display default channel names above knobs (INPUT 01, INPUT 02, etc.). <ul style="list-style-type: none"> <li>If this is not the case, it's possible one or more devices do not have the latest firmware updates.</li> <li>Minimum versions required: Hub Firmware 6.1 with Bootloader 2.5; Mixer Firmware 6.1 with Bootloader 2.24.</li> </ul> </li> </ul>
Cannot name channels with iOS app	<ul style="list-style-type: none"> <li>Ensure the firmware on the Hub and Mixer have the latest update. <ul style="list-style-type: none"> <li>Minimum versions required: Hub Firmware 6.1 with Bootloader 2.5; Mixer Firmware 6.1 with Bootloader 2.24.</li> </ul> </li> <li>Update the Hear Back PRO iOS app on your device to the latest version.</li> <li>If naming through the iOS app continues to fail, use the Hear Technologies Desktop Config Editor to assign channel names.</li> </ul>
Desktop Config Editor is not updating channel names	<ul style="list-style-type: none"> <li>Updated file must saved as "CONFIG.TXT" to the "Hear Back Pro Hub" drive connected to your computer. <ul style="list-style-type: none"> <li>Check connection of USB B-A cable from "Progam" port on Hub's Main Board to USB port on a Windows computer.</li> </ul> </li> <li>Ensure the firmware on the Hub and Mixer have the latest update. <ul style="list-style-type: none"> <li>Minimum versions required: Hub Firmware 6.1 with Bootloader 2.5; Mixer Firmware 6.1 with Bootloader 2.24.</li> </ul> </li> </ul>

Firmware updates available for download on our Support webpage under "Hear Back PRO":

**[www.HearTechnologies.com](http://www.HearTechnologies.com) > Support**

If you need further assistance, feel free to contact **Hear Technologies** technical support

Tel: +1 (256) 922-1200 ext. 1135

Email: [support@HearTechnologies.com](mailto:support@HearTechnologies.com)

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## LIMITED WARRANTY

Hear Technologies warrants the equipment against defects in materials and labor for a period of one year from the original date of purchase. The duration of this warranty is limited to claims made to Hear Technologies within the periods stated with respect to parts and labor from the date of purchase. During the warranty period, defective equipment will be replaced or repaired to the general condition as received, at the discretion of Hear Technologies.

All transportation is the responsibility of the purchaser or owner. Equipment should be shipped in the original shipping box.

This warranty applies only to defects in materials and workmanship and does not cover failure or damage due to shipping loss or damage, abuse, misuse, misapplication, incorrect or varying power line voltages, lack of proper maintenance, natural disasters, acts of God, or unauthorized modifications, repairs, or any alterations done without the expressed

written consent by Hear Technologies. Hear Technologies shall not be liable for any loss of use of the equipment, or consequential damages, including damages to other parts of the installation in which the equipment is a part.

Hear Technologies does not make any warranty, express or implied, other than the warranty contained herein. No agent, representative, or employee has the authority to increase or alter the liability, obligations, and terms of this warranty or sale of the equipment. NOTE: It is strongly recommended that any equipment returned to Hear Technologies be properly packaged and insured for its full value in case of loss, handling or shipping damage.

Hear Technologies shall not be responsible for damage or loss of equipment during shipment.

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