

# hear back PRO

## PERSONAL MONITOR MIXER SYSTEM

### Network Input/Output Card



SCAN  
CODE  
FOR USER  
GUIDE

#### OVERVIEW

Provides (8) RJ45 Ethernet ports for connecting Hear Back PRO Mixers, PRO Mixer Distros, or other Hear Back PRO Hubs. Each port provides Power over Ethernet Plus (PoE+) power and digital audio over a single CAT6\* Ethernet cable that can be run up to 566 feet.

Up to (4) Network Cards can be populated per single PRO Hub. Also available as “stand alone” in the PRO Mixer Distro (PRONET).

#### INSTALLATION

A Network Card must first be inserted into the Hear Back PRO Hub's card slot 4 to transmit power, ground, and audio to PRO Mixers via standard CAT6\* cables. Each network card can support use of up to eight Mixers simultaneously. Additional Mixers can be used by inserting a second, third, or even fourth network card into card slots 3, 2, and 1, respectively. However, to power more than two network cards (or more than 16 Mixers), an additional power supply is required.

The first two network cards in slots 3 and 4 will receive power if a power supply is present in either power port; the second two network cards in slots 1 and 2 will only receive power if a power supply is present in both power ports. Additionally, a second power supply serves as redundant power to slots 3 and 4 in the case that one power supply were to fail. A yellow LED under each power port indicates the presence of 48 volts, even when the Hub is powered off.

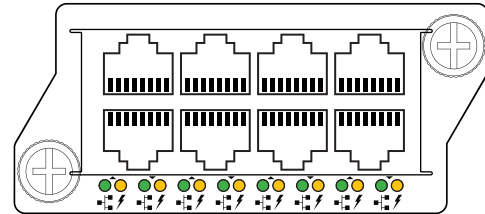
#### PIN-OUTS

The network card's RJ45 pin-outs are the same as standard gigabit Ethernet RJ45 pin-outs, as shown below:

Pin	Pair	Description	Suggested Termination Color Scheme (568B)***
1	A+	Power over Ethernet (PoE) 48v**	white/orange
2	A-	Power over Ethernet (PoE) 48v**	orange
3	B+	Power over Ethernet (PoE) GND**	white/green
4	C+		blue
5	C-		white/blue
6	B-	Power over Ethernet (PoE) GND**	green
7	D+		white/brown
8	D-		brown

\*\*Gigabit PoE uses a transformer on the data pairs to allow power and data to share the same pairs similar to how phantom power works on microphones.

\*\*\*Color Scheme 568A is also acceptable, but do not crossover from 568A to 568B.



#### PoE+ POWER & DIGITAL AUDIO I/O

8 RJ45 Ethernet ports for connecting Hear Back PRO Mixers, PRO Mixer Distros, or other Hear Back PRO Hubs

#### STATUS LEDS

⚡ Digital Audio status 'Green'

⚡ 48V PoE+ Power status 'Yellow'

Each Mixer output on the network card has a power supervisor circuit that will only power the port if a valid PoE device is detected. In the event of a shorted cable or broken Mixer, the power supervisor circuit will disconnect the load, permitting other Mixers to function while protecting the power supply from the faulty output.

Although the PRO system is based in Gigabit Ethernet (T1000), the Network card is capable of handling base T10, T100, and T1000. This is especially important for use in a PRONET as a stand-alone network switch.

**NOTE:** The Network card requires firmware version 1.4 to be used as a network switch in the PRONET.

#### TECHNICAL SPECIFICATIONS

Power: 48 VDC PoE @ 30 watts  
Auto-crossover: Enabled on every port  
Energy Efficient Ethernet (EEE): Disabled

\*Cable complying with the National authorities (cable with an outer jacket or sleeving rated VW-1 or better).



Hear Technologies®  
991 Discovery Drive  
Huntsville, AL 35806

www.HearTechnologies.com  
Phone: 1-256-922-1200  
Fax: 1-256-922-1221

Printed in U.S.A. ©2020  
FEB 2023