

## Studio Headphone Amplifier

Part # N20-HP10-0



# Welcome to the World of the Howler Monkey.

Thank you for purchasing the Howler Monkey by NotaBotYet. We feel it is one of the loudest, cleanest studio headphone amplifiers available, hence the name. The howler monkey is one of the ten loudest animals on earth with its calls being able to be clearly heard nearly two miles away!

#### Overview:

The Howler Monkey was designed to deliver precision and reliable amplification of an audio source to nearly any pair of headphones. It is a dedicated headphone amplifier with +4dBu balanced line stereo inputs on an RJ-45 connector. The amplifier is packaged in a durable 12-gauge aluminum compact chassis designed to be easily mounted under a studio counter or as a countertop unit.

## What is with this Monkey?

We did not "monkey" around with the design of this product. Many headphone amplifiers on the market are designed for very high end, high-impedance headphones in the 200-600 ohm range. However, in our lab tests, many of these amplifiers were severely underperforming with typical low impedance headphones that are more commonplace in broadcast studios. When listening to these at a moderately loud listening level, they could not supply the current needed for these headphones, and suffered severe distortion. Other amplifiers suffered the opposite problem and could not drive a large enough voltage to drive high-impedance headphones.

Every component in the Howler Monkey was carefully selected to provide the highest possible quality audio performance while keeping the device affordable. (Seriously, we could have gone crazy here, but decided against laser-trimmed hand-matched gold-plated germanium FETs!). The Howler Monkey was, however, designed to handle a wide range of headphone impedances, providing what we feel will be one of the best listening experiences you will have with your headphones.

## SPL Warning:

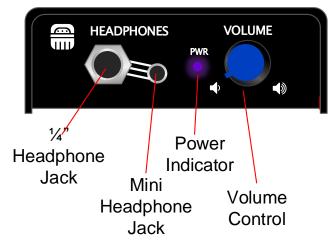
This product can produce extremely loud audio listening levels. Prolonged exposure to high audio levels can cause permanent hearing damage. This is a product designed for professional use in a professional environment. NotaBotYet, LLC is not responsible for improper use of this product that may result in hearing loss or damage to underpowered headphones. Use of this product constitutes that the user will hold the manufacturer and their respective employees and executives harmless from and against all losses, costs, liabilities, claims, damages and expenses of every kind and character, as incurred, resulting from or relating to or arising out of use of this product. Please listen responsibly.

#### Instructions for Use:

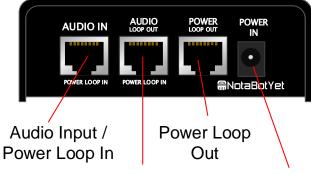
- 1. Physically place the Howler Monkey in its desired location. If mounting under counter, use the supplied screws to secure it. For tabletop mounting, attach the supplied rubber feet to the bottom of the unit. In all instances, make sure the jacks in the rear of the unit are still easily accessible and not blocked.
- 2. Connect the power supply to the unit by plugging it into the +12V connector on the rear. Plug the power supply into a nearby AC outlet. The PWR LED on the front of the unit should illuminate as soon as power is applied.
- 3. Connect an analog stereo signal source to the AUDIO IN RJ-45 connector. This can be from a breakout connector (not included) available from providers such as *American Recorders, StudioHub, XI Audio,* or others. This source could also be via a Cat5 cable form a device with native RJ-45 audio connectors such as an *Axia xNode, Wheatnet IP-Blade,* or other such device.
- 4. Turn the volume level on the front of the unit completely counter-clockwise.
- 5. Plug headphones into either the ¼" headphone jack on the front of the unit, or the mini headphone jack, also on the front of the unit.
- 6. Use the volume control to adjust level to a desired listening level.
- 7. If no audio is present, check to make sure audio is present on the input source, making sure the input is feeding the correct input jack on the rear of the unit. Also, check the power LED to make sure the unit has power.
- 8. If audio is present, enjoy listening via the Howler Monkey.

## **Product Diagrams:**

#### **Howler Monkey Front**

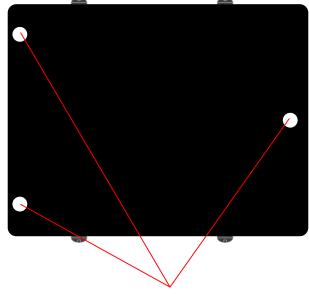


Howler Monkey Back



Audio Loop Out/Power Loop In 12V Power Input (Center +)

## Howler Monkey Top View



**Undercounter Mounting Holes** 

## **Technical Specifications:**

#### Inputs:

- Input: +4 Balanced Stereo Line Input on RJ-45 connector following industry standard pinouts.
- Maximum Input Level: +22dBu
- Common Mode Rejection Ratio: 90dB typical

#### Outputs:

- Output Power: Measured at 700mW into 33ohms @1KHz
- Output Impedance: 10ohms (output protection resistor in series with output)
- Frequency Response: ±.5dB 20Hz to 20KHz

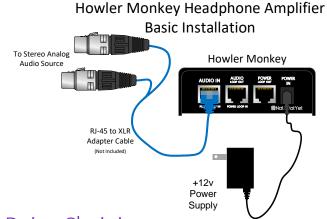
#### Power Supply Requirements:

- +12V @ 200mA
- Included 1A power supply can power up to 5 total units.

#### Physical:

- Dimensions (H x W x D): approx. 1.4 x 3.75 x 4.75" (35.5 x 95.25 x 120.65mm)
- Weight: approx. 8.5oz (.25kg) main unit,
  14oz (.4kg) packaged with power supply.

## Installation Examples:

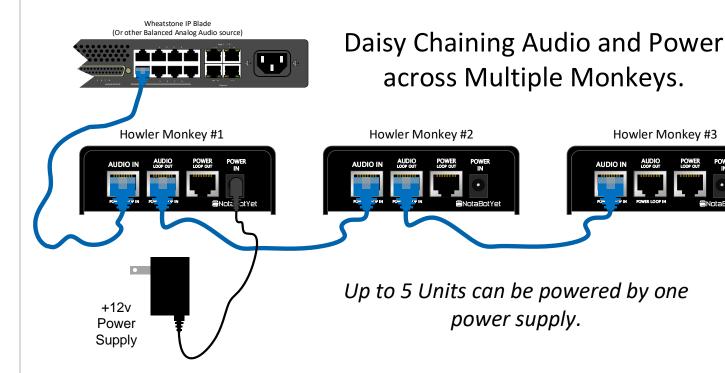


## Daisy-Chaining:

The Howler Monkey can be installed in a "daisy-chain" fashion. This can be facilitated in 2 different ways depending on the application.

#### Daisy-Chaining audio and Power:

This is the simplest form of daisy-chaining to implement with the Howler Monkey. After connecting power and and audio source to the first device, simply connect a shielded CAT5 cable between the "AUDIO LOOP OUT" of the first device to the "AUDIO IN" of the next device. This process can be repeated for a total of up to 5 devices.



## Daisy-Chaining:

#### Daisy-Chaining Power Only:

There are some installations where the installer may wish to share power across multiple Howler Monkeys while providing unique audio feeds to each device.

This does require a minor change inside the Howler Monkey requiring removal of the cover to remove four audio jumpers.

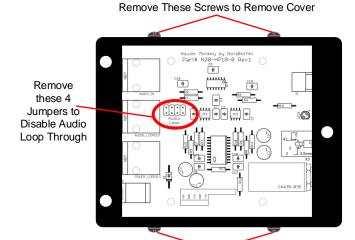
To start, carefully remove the cover by removing the four screws on the sides. Be careful replacing these screws as they are self-tapped into the aluminum chassis and easily stripped if overtightened.

Next, remove the 4 red jumpers near the middle RJ-45 jack near the rear of the unit. This will disable audio loop-through on the middle RJ-45.

Carefully reassemble the unit.

If you ever wish to loop audio and power again, simply follow this procedure again, simply replacing the audio jumpers.

#### Configuring the Internal Jumpers:



Remove These Screws to Remove Cover

Now individual audio can be supplied to the "AUDIO IN" of each unit. The "AUDIO LOOP OUT" jack is now a "POWER LOOP IN" jack.

To loop power, simply connect a Cat-5 cable from the "POWER LOOP OUT" jack and the newly configured "POWER LOOP IN" JACK.

Up to five units can be powered from one +12V 1Amp power supply.

