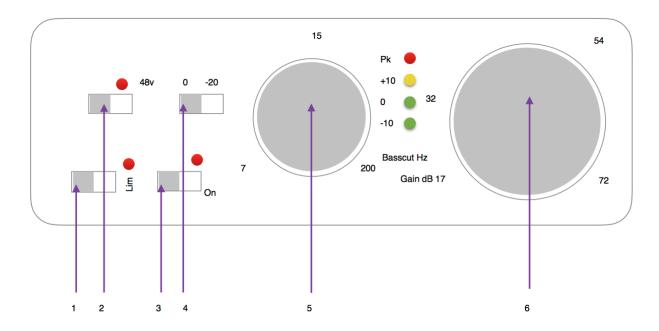


At just 4 cubic inches and 4 ounces, the Mini Papi is a tiny pre amp with a lot of punch. It is designed to fit on the smallest of cameras (such as the Alexa Mini or RED), and also in the smallest of sound bags. Although it is small, it has a quality and design features of larger, more expensive pre amps. It has a wide dynamic range that offers a full sounding low end. The gain control has 72dB of gain with 55dB of range. There are 2 limiters, a continuously variable bass-cut, switchable output level, isolated power supply, front end RF filter, chassis mounted connectors, alternate usb powering, and 48 volt phantom power that will power even the hungriest of mic's. The Mini Papi is a new generation of portable Pre Amps. It offers near studio sound and multiple features in a tiny size!

## **Mini Papi Layout and Instructions**



1 - Limiter ON/OFF switch - If you shift the switch to the left, it will disable the limiter. Shifting to the right will enable the limiter. The LED will illuminate when the limiter is working. The Peak LED will light about 2dB before clipping.

There are 2 limiters that have been designed into the Mini Papi to significantly reduce the possibility of clipping. The Front-end Limiter limits the signal early in the chain while the Back-end Limiter limits the output level from getting too high.

- 2 Phantom Power ON/OFF switch When you shift the switch to the left it will turn the Phantom Power OFF. Shifting the switch to the right will turn Phantom Power ON and the LED will illuminate.
- 3 Papi ON/OFF switch Shifting the switch to the left will power the unit OFF; shifting right will turn the unit ON. The LED illuminates when the unit is powered ON.
- **4 Output Attenuator** When the switch position is to the left, the output is at 0dBu when the "0" LED is illuminated. Shifting the switch to the right reduces the output level by 20 dB ("0" LED refers to -20dBu).

The rule of thumb for audio is that the wider the dynamic range, the better the sound produced. For this reason, the Mini Papi was designed to have a wide dynamic range to give the end user ultimate control of the audio to avoid clipping. However a large dynamic range can cause complications when trying to use it with other devices that have not been designed to handle those levels. To avoid clipping in other devices, the Output Level can be changed from 0dB to -20dB.

**5 - Bass-Cut Control** - The High Pass Filter (Bass Cut) is continuously variable from OFF to 200 Hz at 12dB per octave. Rotating the knob fully counter-clockwise will effectively turn it OFF; rotating in a clockwise direction will increase the Bass-Cut.

Low frequency noise caused by wind, traffic, or machines can make the audio unusable. The Bass-Cut control allows this low-frequency noise to be reduced.

**6 - Rotary Gain knob** - The Mini Papi has 72 dB of Gain with a range of 55dB. There are 4 LED indication lights located to the left of the Gain control. They show how much output the Mini Papi is producing. The numbers to the left of the LED's denote the levels. Rotating the knob counter-clockwise reduces the Gain; rotating clockwise increases the Gain.

Setting gain is a trade off between signal output, noise, limiter action and headroom. For normal operation the gain should be adjusted such that the 0 level LED lights occasionally and the -10 level LED is on most of the time. With the limiter set to On the MiniPapi will work to keep the output level from getting too high into the device that the MiniPapi is connected to. The input level of the connected device should be set as recommended by that manufacturer.

# **Other Design Features**

### **Front End Filter**

RF interference can be a problem and cause noise. A Front-end filter has been designed into the unit to reduce this possibility.

#### **Power**

The Papi can be powered from 5 to 18 volts DC. The Audio version has a 4-pin Hirose and the Camera version has a 2-pin Lemo. However the Mini Papi has a second powering option via the Micro USB. The mAH requirements vary depending on the microphone it is powering. When Phantom Power is not in use, the Papi will draw 500mA from the Micro USB power source. If the Phantom Power is on, then we suggest at least 2500mAH. The Mini Papi USB will not power up from a computer. Please note that the Power Supply is isolated to help prevent hum loops and avoid problems with -ve and +ve power grounding.

## **Construction Design**

With field use comes the need for added durability. The Mini Papi has been designed in such a way to combat abuse from daily wear and tear. The case is made from strong aluminum. The connectors are a XLR input and a TA3 output and are chassis mounted for durability.

### Mini Papi Specifications

Frequency Response: 20Hz - 50kHz +0 - 1dB Gain: Variable from 17dB to 72 dB; +2-0dB EIN: -127dBu A weighted 150ohm source Size & Weight: 2.5" x 2.1" x 0.8" and weight 4 oz.

Clipping level: 29dBu into 10k ohm load

Power: external only 5v - 18v DC; Micro USB is 5v, 1000mA and will not power from a computer

Distortion: <0.05% 30Hz - 50kHz + 10dBu output level, 80KHz bandwidth

High pass filter: variable from 7Hz to 200Hz, 12dB per octave

Limiter level: +7dBu, attack 10mS, release 100mS

Input impedance: 2200 ohms

## **Company Information & Warranty**

Mozegear products are designed, made, and serviced in the USA (Irvine California). Service Centers are located in both the US and in the United Kingdom. All Mozegear products have a 2-year warranty.