HARMONICA FEEDBACK KILLER & MID-BASS EQ - Instructions Manual

My dear harmonica players...

All of you know that on today's market there are not too many amplifiers designed for amplified harmonica ! Some of them are no longer in production, like: **SONNY JR.** , **METEOR**, etc...
Some other models or brands are made only on special order(and are available after a long or very long waiting time !!!) and are pretty expensive for many of you all around the world - **HARP KING**, **HARP GEAR**, etc...

In many situations, if you are a travelling harmonica player that is touring all around the world or even inside your country, you can't bring your own custom harmonica amp(if you already own a good model !) and in many situations, in many clubs and festivals, you're not able to use a tube amplifier designed specifically for harmonica... and that for different reasons...

So, in many situations you're forced to use a tube amp(*or, in a worst situation an amp on transistors/solid state*) that is suited for guitar but "unfriendly" or "very unfriendly" for harmonica. And you'll have to fight feedback !
Especially if you don't have a proper tool/device that will help you to reduce or possibly to eliminate almost completely the pesky feedback.

Well... the answer is this device here - **HARMONICA FEEDBACK KILLER & MID-BASS EQ !!!**

Of course... All of you will ask... what is so special about this one...?
Well... There are few features that I think will make a difference !

1) As you'll be able to see, ***this device DON'T USE BATTERIES*** !

We managed to solved the problem with the aid of an analogue power converter that is fitted inside the case and is feeding the electronic circuit with the proper DC voltage ! We didn't use a digital power source, that is based on the "switching power technology" that in many situations is prone to induce a very annoying high pitch noise !

So, as I said, we managed to solve this problem. The device can be powered at **200-230 volts AC** or to **100-120 volts AC**, depending what is the standard in your country, and **you'll be able to do that using that RED SWITCH located on top of the socket for the power cord.**
For example***: if you live in USA***, you'll select the **voltage 115**. If you'll travel outside USA in a country were the standard AC voltage is between 200-230 volts, you'll just move the switch to **230 volts position**. SIMPLE !
BEFORE YOU CONNECTING THE DEVICE WITH THE AC Voltage POWER CORD TO THE POWER SOCKET, CHECK FOR THE VOLTAGE SELECTOR TO BE IN THE CORRECT POSITION FOR THE AC Voltage VALUE THAT IS THE STANDARD IN YOUR COUNTRY !!!

(***) VERY IMPORTANT !!!

We designed the circuit that **the signal of the harmonica microphone is going first into the MIC GAIN LEVEL** section, were you'll be able to adjust the level of the signal from your microphone in order to obtain the amount of attack that will overdrive your amplifier.

Connect your microphone to the **INPUT** of the device and holding your harmonica and your microphone in your cupped hands start playing a favourite harmonica lick and adjust the amount of signal coming from your microphone using as a reference the **RED LED** named **CALIB**.
Usually when the CALIB led is flashing continuously when your playing it means that the signal level from your microphone is at the proper level.

But, you can also adjust the level of your microphone using just your hearing to achieve the overdrive sound from your amp !

After that, the signal is going first into the Mid-Bass EQ section !

2) The MID-BASS EQ - This control is a key feature of this device !

<u>ONLY</u> THIS CONTROL IS WORKING COUNTER CLOCKWISE !!!
So you have to rotate the potentiometer from RIGHT to LEFT !!!

This section of the device will allow you to cut the necessary amount of mid-bass/mid-low frequencies(or to eliminate them completely !) that in many situations are the cause of feedback !
This control is extremelly effective that in many situations will eliminate almost completely the frequencies that are causing feedback !
BUT(!!!) if you don't feel/hear that is necessary to use this control, you can leave it completely close and in this situation the signal from the microphone is bypassing the Mid-Bass Eq circuit and it goes into the main ANTIFEEDBACK circuit !

3) ANTIFEEDBACK - when applied gradually, this control will allow you to eliminate even more of the unwanted frequencies that are causing feedback !

I recommend to start with this control at "12 o'clock" !!!
If the amplifier you're using is very "unfriendly" and it keeps causing feedback at higher volume levels, ***increase the amount of this control in small steps*** !

4) ODD FREQUENCIES EQUALIZER - this control is very useful when you have to deal with a very "unfriendly" amplifier ! Will allow you to eliminate most of the frequencies that are causing feedback problems.

I recommend to start with this control at "11 o'clock" !!!
If the amplifier you're using is very "unfriendly" and it keeps causing feedback at higher volume levels, ***increase the amount of this control in small steps*** !

THE "ODD FREQUENCIES EQUALIZER" CONTROL MUST BE USE IN CONJUNCTION with the "ANTIFEEDBACK" CONTROL !

If you have a harmonica microphone that has a very powerful output level, and you are forced to use a very "unfriendly" amplifier for harmonica, is better to lower a little bit the amount of the signal coming from your microphone using the "MIC GAIN LEVEL" control.

All these controls will give a wide range of possibilities/choices to fine dialing your amplified harmonica sound when you are forced to use an amplifier not "harmonica friendly" !!!

(***) VERY IMPORTANT !
All the adjustments you're making on the controls of this device are also working in conjunction with the volume control and the controls of the EQ section of your amplifier !

The INPUT of the device has an impedance of 5,6 Mohms, that suits a wide range of microphone elements, especially the more demanding old high impedance crystal and ceramic elements and, of course, high impedance controlled Reluctance/Magnetic and Dynamic elements !

Enjoy ! Best regards, Marcian Petrescu – harmonicamark2001@yahoo.com / Phone: **004 0751 511 846**