

## Basie Pre-Amplifier Kit (Line Level and MM Version)

### Introduction

The original SRPP Consonance Basie Preamplifier kit has recently undergone a redesign to incorporate a MM phono stage along with a number of other changes to the circuit to bring in some improvements. The MM stage uses 2 tubes, 1 ECC81 (12AT7) and 1 ECC83 (12AX7). The Line stage also uses 2 tubes, both are now ECC81 (12AT7). The power supply is based around a valve rectifier stage with choke smoothing like the original Basie. The output is capacitor coupled. Again, it is very well made unit and of robust construction and complements the other consonance gear very well.



The newer Basie vacuum tube pre-amplifier with MM phono stage. Note the 1 extra tube socket compared with the original Basie. Everything else is the same.



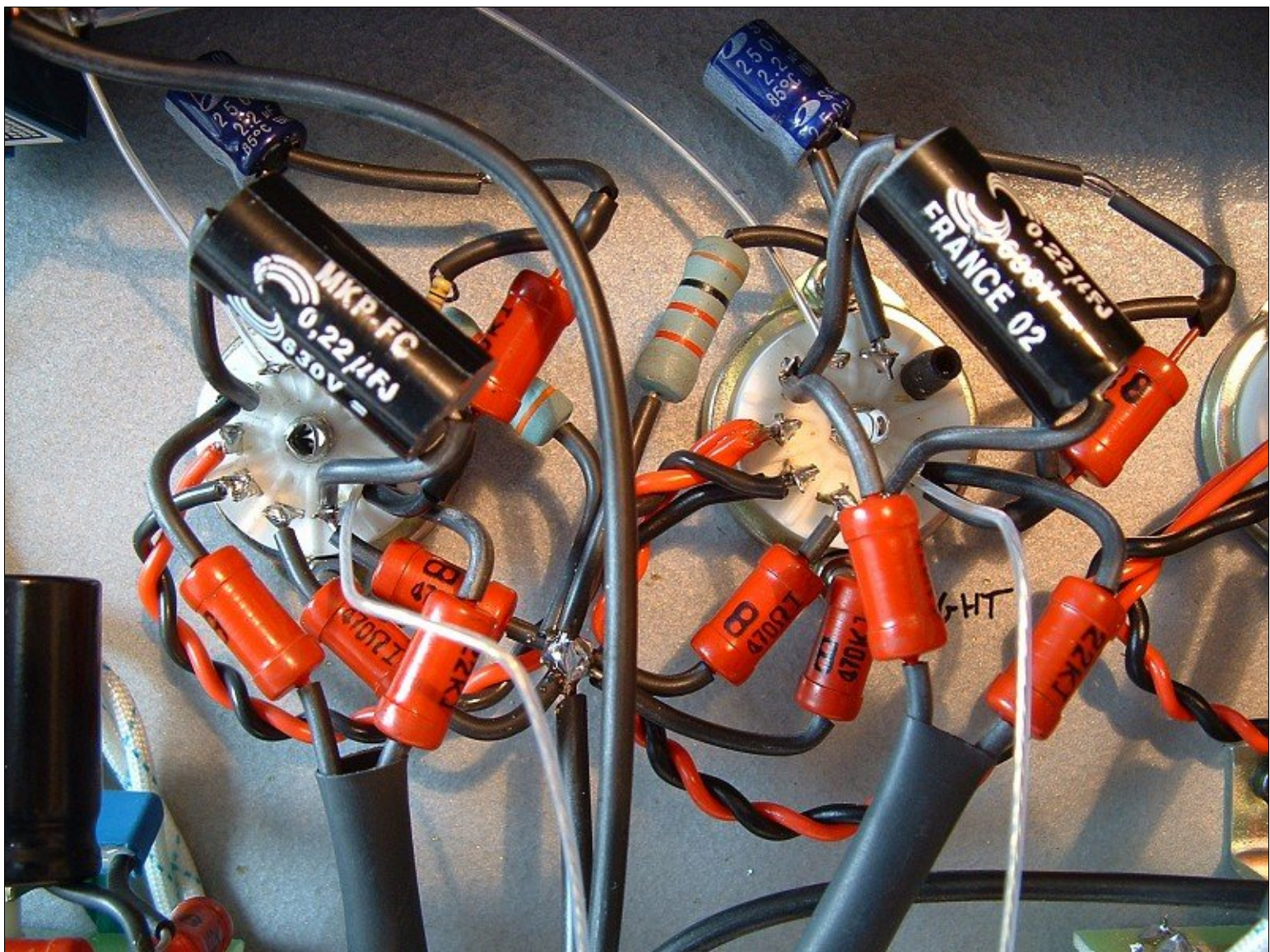
The Basie as it arrives with the parts bags inside.



It uses the same transformer and choke filtered power supply as the original Basie. Here the choke is shown. The choke is traditionally made with paper and varnish.



Basie Mk2 Complete. The circuit is more complex than the original srpp unit and more of a challenge to build. A little crowded with the extra tube socket and phono stage.



Basie Mk2 Line stage circuit. There is a separate star earth arrangement for the MM and the line stage and all components are mounted on the valve bases. It is very quiet in operation.



All Finished. This version comes with Electro-Harmonix signal tubes which are very nice. I was pleasantly surprised with these tubes especially after listening to many NOS tubes like Mullard, GE, Sylvania etc. The usual 5Z4P rectifier tube which is also a good rectifier for a modern production unit.



Basie Mk2 on test. The unit sounds very good and really blew away my expectations.



Both the SRPP and MM Basie Pre-amplifiers on test.

## Sound

I was pleasantly surprised with the new pre-amp kit from diyhifisupply and consonance. Considering I had not built this with a DACT, upgrade resistors and better tubes like I did with the original Basie it sounded very good indeed even from first use before full burn-in. It is very musical and I found myself listening to this more than the original Basie. The Electro-harmonix tubes supplied are also a good tube. I had not heard these tubes before and was not expecting much having used Mullard tubes for as long as I can remember along with many other British and American NOS types. The Electro-harmonix are a modern production unit made in Russia. I would recommend them considering the price compared to what is being asked for some NOS tubes.

This new Basie sounds very natural and evenly balanced throughout the frequency range. It also sounds cleaner than the standard build SRPP Basie unit with the cathode follower. I guess this is due to the new circuit design. This proves that quality components alone do not make a great amp but the design is a key factor. Kind of obvious really. A well designed circuit with average to good components should outperform a mediocre circuit with the best components. Not that the SRPP based Basie is bad, far from it. It betters many higher end commercial pre-amps I have heard.

This new Basie is very well behaved and balanced on a wide variety of music styles were-as the original Basie seems to work much better with well recorded music but can become a little unstuck on very dense mixes, esp those that are badly recorded. I guess this depends on your music tastes. This new version is more musical than the original line level only Basie and as a result I found it more entertaining and forgiving of a wider range of recordings.

## Initial Tube and Capacitor Upgrades

I decided to try my favourite brand of tube, namely Mullard, ECC81 in this case. To my surprise they sounded shrill and very bright even after some time for burn-in. This is unlike Mullard tubes in general as they tend to be full and sometimes a little 'fat' sounding, never bright even after just a few hours of burn-in. So back to the EH brand for now. It is interesting to note that the ECC81 is not considered to be a great tube by many, almost as bad as the ECC88 (6922) to some, the original Basie using the more favourable ECC82's.

Out of curiosity I tried my E80CC tubes, a very under-rated and under-used tube. These are a high MU tube very similar to the 81, but are deemed a special quality tube. They worked quite well in the SRPP Basie even if they are a very different tube from the ECC82 (High MU E80CC vs the Low MU of the ECC82). In the new Basie they worked even better, vastly superior to the Mullard ECC81 (CV4024), fuller and richer sounding. They pull double the heater current than an ECC81 so the MM stage tubes had to be removed to use them in the line stage otherwise it would stress the heater supply regulator.



I later upgraded the output coupling capacitors to AudioNote Copper Paper in Oil and the inter stage coupling capacitors to Beeswax Paper types. Both of these upgrades results in a very smooth and lush sounding amplifier with a spotlight on the mid range.



These capacitor changes now just about allowed the use of the Mullard ECC81's in the line stage without the over bright sound as previously although the E80CC is still superior. Some people dislike the PIO sound claiming them to be 'muddy'. I do find the sound smooth but not muddy. In fact, compared to the stock Solen caps supplied with the kit these do allow much more information through without sounding thin, harsh or brittle as some plastic caps can do (not all do though). The amplifier with these capacitors is not as fast sounding on certain music styles (i.e. electronic, rock) when compared to the best polypropylene types. However on acoustic style vocals the sound is very lush, warm and seductive. I think it is a matter of personal taste and what works best in the rest of your system and what music you mostly listen to. This was just an initial test of capacitor types for me.

If you want a very fast, detailed and more analytical sound then I would suggest you stick with other types for the capacitors. However if you desire a more warmer and lush sound then try some paper types on the output or inter-stage. Mixing paper capacitors at stages and film-foil capacitors in other stages can also work very well which I have done with success. For example, using film type capacitors for the inter-stage coupling with paper based on the output gives a balanced sound without sounding overly warm. If you use too many PIO caps in a pre-amp and power amp then the overall sound can become too warm and lack HF extension and attack. Using all plastic caps in an already bright system can really exaggerate matters or make your system sound very thin and lacking in body. I did try using all AN copper PIO capacitors on the Basie at both the output and the inter-stage. This added more mid range detail and emphasis but at the cost of HF extension. This worked really well on acoustic style music with vocals and some bright badly recorded material but not so good on electronica or rock. So a balance of capacitor types seems to be the ideal if you have a wide music taste.

The point is that it is possible to 'tweak' the sound with tubes and cap choice to suit your system, room and ears. This is always the advantage of a kit build over a commercial product.

### **Silver Mica Capacitor Types and the PEC POT**

I obtained some Russian Teflon Capacitors to use in the Joplin DHT Push-Pull power amplifier and I thought I would give them a try in this Basie also. These are an in-expensive industrial capacitor but a very worthy upgrade. They can sometimes be found on ebay. Most audio grade teflon based capacitors are very over priced IMHO. I initially used them in the 0.1uF coupling stage of the Basie in place of the Paper Beeswax types. They are large at 6cm long by 3 cm diameter. I can only describe the sound character as neutral to very slightly 'creamy'. They have the best properties of film-foil capacitors in terms of speed, attack and HF extension without sounding gritty or brittle. I rate these higher than most of the film-foil poly caps I have tried including the popular cheap RS arcotronics types, which did sound a bit gritty to my ears on vocals.



I finally tried some 0.1uF silver mica's at the inter-stage. These are the large brown square capacitors you can see in the photo. A pair of these eventually made their way into the 300B power amps I use, so it was time for a test in the Basie. At first they do sound thin and a little bright but they quickly settle down and start to flesh out. They are incredibly detailed.

Although these Silver Mica's do not have the same rich body of the Copper PIO capacitors they win hands down on detail. In order to bring some more body back to the sound I upgraded the Alps Blue POT to a PEC Potentiometer. This is an all carbon POT with a solid carbon wiper. It is resin sealed and military spec build. This pot is also more detailed than the Alps Blue but with that extra body and weight the Alps lacks. It is all about a balancing act with components. They all colour the sound to some degree, both caps and tubes especially. You can use this to your advantage to 'balance' out the sound to your liking and system. Finding a balance between detail and musicality can be quite hard.

### **Conclusion**

In summary, the new Basie MkII is a winner, this is my main pre-amp for now. With careful tube choice and some upgrade capacitors this pre-amp can really shine with great musicality. Like the original Basie it is also very well made and could sit along side any hi-end commercial gear and hold its head up high. It works particularly well with the Billie/ Ladyday+ power amplifier. Owners of the original SRPP line level Basie might want to consider re-wiring the circuit to the new circuit used in this unit if you desire more musicality in your system.

### **The Final Build With Tweaks**

2 x E80CC Mullard Tubes in the Line Driver Stage (MM Stage Unused)

1 Mullard GZ32 Rectifier Tube

2 x 0.1uF 500V Silver Mica's

2 x AudioNote PIO Copper Output Coupling Capacitors or Teflon Capacitors

Solid Silver Wire for all Audio Connections Inside