

hardware review



Falcon Acoustics LS3/5a Gold Badge

Monday, July 6, 2020 René van Es

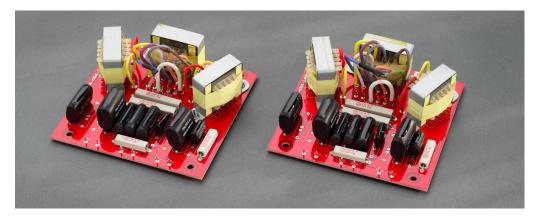
The reincarnation tale of a genuinely classic loudspeaker reads almost like a thriller. Two retired men started a project to bring back the BBC developed LS3/5a loudspeaker, originally designed for nearfield monitoring in mobile studios to judge voice recording during interviews. That little monitor somehow survived all others and in the Far East it has gained true cult status. Old and damaged examples are offered on eBay for crazy prices, collectors try to get samples made by all the original licenced companies including Spendor, Audiomaster, Rogers, KEF, RAM and probably others too. The 15 Ohm original version is preferred to the later 11 Ohm version that used another version of the KEF B110 woofer. The B110 is accompanied by a KEF T27 tweeter and a BBC designed crossover are the key elements in this legendary bookshelf but it's a more complicated story than it seems.

When former KEF drive unit designer and Falcon Acoustics founder Malcom Jones decided to retire he offered the company to his friend Jerry Bloomfield, but the latter decided to go rather further and persuaded Malcolm to help him build KEF B110 drive units to original spec as KEF no longer made them yet there was still plenty of demand. One thing lead to another and a few years back Falcon started building their own 'letter of the licence' LS3/5A, you can read about the company here. This proved to be the beginning of a long period while Jerry tried to source parts that met the original specs which in the case of the Bextrene cone in the B110 meant getting new ones manufactured and building the drivers from the ground up. Some remaining original Tygan cloth was found in Denmark and cabinets made of Baltic ply and beech were sourced. like all other materials, from the UK. Even the staples used to hold the Velcro for the fronts resemble the original colours. Once the speakers were finally ready and production started the Falcon LS3/5a became an instant success in Japan. However in the Netherlands where I live distribution was far from successful, only a handful of dealers were interested as the Dutch never truly understood what the fuss was all about. Falcon Acoustics manufactures the only genuine LS3/5a since they use the original, otherwise unobtainable drivers and crossovers, made to original KEF and BBC specifications and patents. Rogers, Sterling and other so called LS3/5a may be good, even preferred, but sound different from the original while a Falcon is the a precise incarnation of the original BBC monitor.

Being eager to get as close to the BBC originals as possible Jones and Bloomfield got hold of the prototype LS3/5a models 3 and 4. Developed in the Kingswood Warren research

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centre these used different materials for the crossover to those specified for production samples. The transformer style inductors in the prototypes had higher saturation values, with less distortion and the capacitors were polycarbonate. Extensive listening proved that these prototypes were sonically better than production types and somehow Falcon Acoustics got hold of enough polycarbonate capacitors and old fashioned transformers to build a small batch of pairs of what they call the Kingswood Warren LS3/5a. This very special batch was sold within eight days of release. Triggered by the improved sound quality the guys from Falcon Acoustics searched for transformer types with the same sound signature as the Kingswood Warren models. One of the other difficulties was that the specific polycarbonate material went out of production long ago, however Falcon managed to get the same sonic signature with

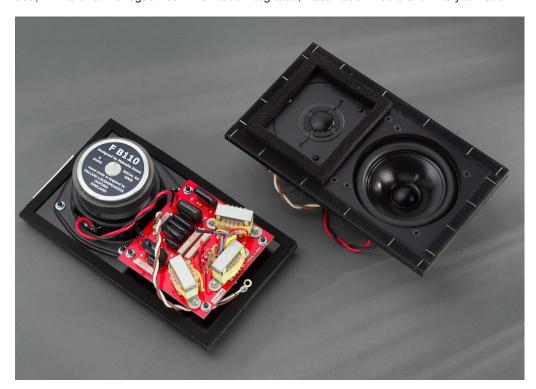


polypropylene film capacitors. These two key components, plus ultra-low inductance resistors, all mounted on a new multi-layer FL6/23 printed circuit board, are hand made to BBC/Falcon specification in the UK/EU and hand-assembled by Falcon Acoustics.

Gold Badge

The new crossover with the name FL6/23 Gold Badge has been used in the Falcon Acoustics LS3/5a produced after January 1, 2020, and is recognisable by the gold badge on the back of the cabinet. Those with older Falcons have recently been given the chance to upgrade to the FL6/23 Gold Badge with a DIY kit that they can install themselves or with the help of a dealer. The change is a straightforward job that can be done in a couple of hours. All you need is a screwdriver, a wrench and a soldering kit. Carefully remove the grilles, loosen the screws to remove the baffle and you have access to the crossover. Swap in the new one, close the cabinet and enjoy the improvement. This is still not have a Kingswood Warren edition since these have different cabinets as well, but is it as close as you can get.

In two years of extensive use I have tried many power amplifiers, cables and stands with the Falcon LS3/5a and its original crossover inside. Amongst them an old but trusted Quad 303, PrimaLuna ProLogue Four EL34 tube integrated, Pass Labs XA30.5 and finally a Metrum



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Acoustics Forte. Not to mention the integrated amps that have come in for review. Stands have included Tonträger, Custom Design open frame and vintage wooden Sonus faber, but the best suited and most stable are Custom Design SQ 402 with IsoAcoustics Gaia II decouplers fitted instead of spikes. Today's cable is costly Inakustik Air-Helix. Most of my kit seems far too expensive for these little speakers, but I found that every time I upgraded a component the LS3/5a was more than capable of delivering the benefits. The source is mostly a Metrum Ambre Roon Endpoint and Metrum Adagio DAC. Last but not least some Townshend Maximum Supertweeters are often on top. But let's stick to the results with the LS3/5a on its own with the Metrum equipment.

I have been very happy for two years and never wanted for another small monitor in my 12sqm room, but I could not resist the FL6/23 Gold Badge crossover upgrade. After installing them, the bass became tighter, the midrange, which has always been the strongpoint, opened up further, while the highest notes are clearer and at the same time a little softer than before. The promised sonic improvement was fully met and I can only advise owners of Falcon LS3/5a with a silver badge to order the FL6/23 Gold Badge crossovers and get the job done. You will love the results and get even closer to the Kingswood Warren BBC research prototypes.

Warm and sexy

Listening to singer Viktoria Tolstoy with her husband on the piano I am treated to a very natural voice, placed exactly in the middle between the two little speakers, at a normal height as if the lady is standing before me. She sounds warm and sexy, clear as water, every word is expressive. She's accompanied by a piano that not only has strings but a body too. Not for a single second do I miss some sort of subwoofer or feel the need for deep bass extension. The piano is free from the singer, she is placed forward, the piano behind her and lower, the piano as impressive as it should be. Stereo image is another key virtue of the Falcon LS3/5a, with the Seven Reizh progressive rock track Soñj I get a wall of sound from ceiling to floor and wall to wall. This is not the case in my 33sqm living room, the LS3/5a is unable to deliver enough sound pressure, but here where I'm closer to the speakers my Metrum Forte's 25 watt are powerful enough to turn neighbours into enemies. It's not just sound pressure, the dynamics presented by these Falcon Acoustics are fine too, the inner detail they present makes my heart beat a little quicker than it should.



Before and after: left - standard Falcon crossover, right - Gold Badge

Talking of detail, well recorded classical music can be heavenly so long as you avoid large symphony orchestras. Italian baroque shines and sends shivers down my spine. My 1969 version of Vivaldi's *Four Seasons* with Alan Loveday and The Academy of St. Martins-in-the-Field seldom sounded so sweet as it did on the Falcon LS3/5a with Gold Badge crossovers. Fine detail is abundant, even the soft rumbling of traffic outside the church has not been lost during the transfer to CD and finally into a FLAC file. Music never sticks to the LS3/5a baffle, even with your eyes open music seems not to come from the speakers, it just exists in the room; projecting a convincing virtual reality. Loreena McKennitt released her *Lost Souls* album in 2018 and this recording is an example of how good acoustic instruments like guitar, strings and harp sound on the Falcons. Her beautiful voice is covered in full, free in space giving the impression of the acoustics of the recording room, or maybe of added effects with the same result. No matter how complex the music gets the LS3/5a separates the instruments from each

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other without losing the big picture. The drive is very good, the musical expression to the limit. But not in a technical sense, it is music for the soul rather than the mind, it's purely there to enjoy so you can forget the mechanics of its reproduction. Placing the monitors a meter away from the back wall with about 40cm to the side walls helps to keep the bass under control. No matter what the specs tell us, the bass seems to go a lot deeper than it should. I really don't need a subwoofer. The icing on the cake in my system is the Townshend Supertweeters which add extra decay to long held notes, to even further increase the sound stage and add that extra sparkle the T27 tweeter is not capable off. Like a Coles 4001 super tweeter did for many British loudspeakers in the past. I recommended you give it a try.



Conclusion

The LS3/5a was never meant to be a transducer for larger rooms. It is far from perfect, it's too small and power hungry compared to more modern loudspeakers, expensive and, according to legend, best suited for 'voices' only. But, and this is a real but, given the right equipment, a suitable room and across a wide range of high quality program material it is one of the most seductive little speakers on the market. It delivers detail, a stereo image to die for, tonal naturalness and even voicing. The latest Gold Badge upgrade has made the Falcon Acoustics LS3/5a even more desirable, it delivers more detail, has the tightest bass of all and betters many more expensive systems on midrange. Over 45 years since the 1972/1974 BBC prototypes this iconic little loudspeaker has lost none of its charm, which is why it is one of the most sought after classics today. Highly recommended to those who can live with its limitations and love to listen to music instead of equipment.

Specifications

Type: Two-way infinite baffle (sealed box) Frequency response: 70Hz - 20kHz ± 3dB

Sensitivity: 83dB for 2.83V © 1m Nominal impedance: 15 ohm

Bas/midrange driver: 138mm Falcon Acoustics B110 - graded and computer matched

Tweeter: 19mm Falcon Acoustics T27 - graded and computer matched

Crossover: Falcon Acoustics FL6/23 (BBC design) graded and pair matched components

Crossover frequency: 3Khz

Cabinet: Selected grade Baltic birch ply, beech battens, internally damped Natural wood veneer finishes: cherry, walnut, rosewood, burr walnut, yew

Dimensions HxWxD: 305 x 190 x 165mm

Weight 5.35kg

Warranty: 5 years on factory built speaker

