

## Early user experience of HW 5.0

### Summary

1. I have been fortunate to be involved with the testing HW 5.0 for a number of months.
2. For the last nine (nearly ten) months I have used this as my only Hauptwerk System. It has been very stable and has worked without any problems. It runs well on Windows 10; using the same few simple tweaks to Windows 10 that I had implemented for HW 4.2 to avoid extraneous audio noises.
3. The sound quality of Hauptwerk 4.2 is excellent. However, the sound from the HW 5.0 system is even better. It is clearer, more detailed, brighter more transparent... it is outstanding!
4. The multi-channel audio is excellent, very flexible and powerful, and gives the opportunity for great control of how the sounds emanates from the system. I was able to set up my system easily after reading the manual. (I use 5 front and 1 rear stereo pairs, one subwoofer, headphones and I use the HW built-in audio recorder.)
5. The HW 5.0 reverberation system is very good and easily set up within the HW audio system. It is much better quality than my aging, external Lexicon MPX 100 unit and far simpler to set up and use than using a companion program (such as Reaper) to add reverberation. There is a choice of Impulse Reverberations provided in the system and others (from third parties) can be added.
6. Having eight preset audio settings (per configuration) allowed me to set up a number of different audio schemes and associate the most appropriate one with each sample set. The audio presets include the routing and the reverberation. This enabled me to optimise the sound of the different virtual instruments I play. When I load the instrument my chosen audio preset is selected for use (automatically).
7. Real-time adjustments to the audio system and not having to re-cache samples enabled me to fine tune and experiment with the audio much more quickly than with previous version of Hauptwerk and so hone the setup for each virtual organ.
8. I have many (too many) sample sets and HW 5.0 has worked with them all.
9. HW 5 is another great step forward for this product. It has come so far over the years and with the right sample set loaded as a live performance instrument is second only to a good pipe organ in a good-sized room.

### Additional note

The iLOK system was not in place for most of my use of the pre release version of the software. I have now tried HW 5.0 with the iLOK system in place using an iLOK 3 dongle which I set up on a machine connected to the Internet; my HW system is not normally connected to the Internet. It only takes a short time to get used to the iLOK manager – it offers a much better way of managing licences for the future. The iLOK “video tutorials” are quite helpful.

I have not tried the MDA automated system for migrating licences from the dongle to the iLOK device, this was carried out manually for me by MDA but I expect that this will work fine at the time of HW 5.0's release.

I have also obtained and installed some of the sample sets which need to be reinstalled for the new iLOK protection system and some which needed to be reinstalled because the encryption system is different in HW 5.0 from the previous version. This has not been a problem - all my settings have been carried forward when the updated version have been installed. I have a reasonably fast Internet connection and usually get on with something else whilst downloads take place.

## **Context**

I have been very fortunate to be invited to test out HW 5.0 before its release.

Early in 2019 I received a pre-release version of HW 5.0 which included most of the new features in the HW 5.0 but did not include the change from the licencing system based on the HASP USB dongle to iLOK licencing. I have used this as my normal everyday Hauptwerk System for nine /ten months on Windows 10 and it has been stable and has worked without problems.

## **Multi-channel audio**

When I received the software, I read the manual provided and in particular focused on the new audio system sections. I then upgraded my 4.2 Advanced system to the pre release 5.0 system. I set up the audio system in a way that essentially emulated the audio setup I had on HW 4.2.

I had always been very pleased with the quality of the sound produced by my HW 4.2 system but was very pleasantly surprised by the improvement in the sound quality offered by the HW 5.0 pre release version. The sound was clearer, more detailed, more transparent and a little brighter; the sounds from my sample sets were more lively and somehow sounded fresher and cleaner. I understand the sound engine has been rewritten for HW 5.0 and the results are a significant improvement on the already excellent 4.2 system. (My audio hardware has remained unchanged.)

My audio system has five stereo channels (10 speakers) which I use as the “front” channels and a pair of small speakers which I uses as a rear stereo channel or as an auxiliary reverberation channel; I have a subwoofer and use headphones for some practicing and use the built-in audio recorder. After reading the manual, I was able to set up the multi-channel audio fairly quickly – it was easier than setting up multi-channel output in HW 4.2.

When I first set up my system some months ago, I did not use the audio routing configuration set into the system by default; this “audio perspectives model” was fully described in the documentation, but I preferred to configure the system fully and not rely on the defaults. This was comparatively easy and did help me more fully understand how the system worked. It showed me that the system is very flexible and offers a vast range of audio possibilities.

Initially, or when the audio routing system is reset, it is configured by default to support the “audio perspectives model” described in the documentation. As a part of testing the pre-release HW 5.0 system I did configure my system following the examples in the User Guide and it worked well too.

The audio routing documentation provided with the released version of the system has been improved since the pre-release version. It more clearly sets out how to set up the audio routing system to meet common user requirements by using the defaults configured into the system (the “audio perspectives model”. I have worked through this and would recommend this as a good way to start.

The audio settings, including rank routing, are no longer stored in the cache file for a sample set. This means that you can change audio rank routing and other audio system parameters without re-caching the sample set and so it is faster to try out alternative audio configurations for a particular sample set.

## **Built-in reverberation**

Whilst most of my sample sets are semi-dry /wet sets, for a few drier sets I added reverberation using a Lexicon MPX 100 when using HW 4.2.

The built-in convolution reverberation system in HW 5.0 is very easy to configure and use. I set up one of the eight audio presets to include reverberation and used it to play the some of these sample sets instead of

the adding reverberation via the MPX100 and there was a definite improvement in the quality of the sound compared to using the Lexicon unit.

In the past I had tried using Reaper to add reverberation – and although I succeeded in getting it to work, I found it a little fiddly and reverted to using the MPX 100. As I have only one pair of rear speakers I had to switch them between outputs generated by Hauptwerk and outputs from the Lexicon when I wanted to play a surround sample set (with independent rear samples) and a stereo set where I wanted the Lexicon to generate the reverberation: this was not very satisfactory. I no longer have to do this – one preset uses these speakers for the rear samples provided with the organ and another preset uses them to reproduce the reverberation (aux reverb) generated by HW 5.0's built-in convolution reverberation. With the Hauptwerk built-in convolution reverberation, I have removed the Lexicon from my configuration and use the HW 5.0 built-in system.

I've only tried the two impulse reverberations which were available for the pre-release trial of HW 5 – these were fine and delivered good sounds. There are more impulse reverberations available in the released product which I've not tried yet.

### **Other things**

I notice that the released version of HW 5.0 includes the ability to select multiple ranks in the voicing and audio panning screen. This was not available in the pre-release version but is a great help in configuring the audio routing. It will also make it simpler to rebalance relative volume of divisions in sample sets where you might prefer something different in your room or studio.

HW 5.0 has a digital clock mini panel. It is surprisingly useful! (It has been suggested it should be an alarm with an option to shut the system down when someone has been playing for too long...)

HW 5 has support for the second generation of LaunchPad's. I've not tried this but my "first generation" LaunchPad continues to work just fine.

All of my settings (other than the audio settings) carried forward to the pre-release HW 5.0 system from the HW 4.2 system. I did not have to repeat the MIDI learn for my console for each of the sample sets.

My system is a Windows 10 PC – with 64GB memory. I suffered from the Microsoft very slow performance problem when applications released memory; this meant that when you unloaded a sample set (which happens under the covers when you load another sample set) could take several minutes. I have followed the advice given by MDA to circumvent this problem for HW 5.0 and it has now made a considerable improvement to the time taken to switch sample sets (and to the time it takes to close Hauptwerk).

Very soon after installing the pre-release version of HW 5.0, I tested this system with each of my (many) sample sets. Initially one (and only one) of my sample sets did have problems with the sound quality of a few ranks of a large instrument when running on the pre-release version of HW 5 (and not on HW 4.2). Martin Dyde and the sample set producer worked together to determine the problem and an updated version of the pre-release HW 5.0 was delivered which completely resolved this problem. (Boringly) I played/listened to all the sample sets again to ensure that the resolution to the problem had not introduced any other aural quality problems. This illustrates the desire to ensure the highest quality in the product.

The iLOK changes were not in the pre-release version of the software I tested. I do think that the change to iLOK will offer a better and more convenient licensing environment and help protect Hauptwerk and sample sets against theft – this is beneficial to both customers, resellers and manufacturers. Moving to the environment protected by iLOK will involve customer effort in reinstalling some sample sets – in doing so I've rediscovered some sample sets I had which not used for a while which sound even better with the new audio system.

I have reinstalled some of the protected sample sets I have using HW 5.0 compatible distributions and iLOK licences. They have all worked so far. Unprotected sets play fine.

All sample sets need to be recached.

#### **Final remarks**

It is was a great pleasure to use the system out over the last nine – ten months. As ever, support from Martin Dyde has been outstanding. The few issues I encountered at the start of the trial which were resolved with updates. Since the middle of March (2019) I have encountered no problems with the HW 5 system.

HW 5 is another great step forward for this product. It has come so far over the years and with the right sample set loaded as a live performance instrument is second only to a good pipe organ in a good-sized room.

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