



# Synchron Stage Vienna

**Resolution visited Austria to speak with owner Herbert Tucmandl, technical director & chief audio engineer Bernd Mazagg, and Gabriel Hauser, project manager & senior acoustician Walters-Storyk Design Group Europe.**

The historic Synchron Stage Vienna, in the grounds of the former Rosenhügel movie studios, re-opened in July this year. Synchron was acquired in 2013 by Herbert Tucmandl, CEO and founder of Vienna Symphonic Library, who enlisted WSDG to upgrade the historical scoring stage into a cutting-edge recording facility. Constructed in the 1940s, the original “Synchronhalle” would host as many as ten large, yearly orchestra film score projects. In the 1960s, eminent classical artists such as Yehudi Menuhin, and Mstislav Rostropovich recorded their legendary works there. Stage A (545 sq. m. / 5,866 sq. ft.) accommodates orchestras of up to 130 musicians. The stage features a substantial, original, room-in-room construction with a three meter isolation gap all the way around. The 115 sq. m. / 1,238 sq. ft. control room features work positions on four different levels. Other amenities include a producer’s lounge, a composer’s lounge, a pre-production lounge, and several guest offices.

The scope of the more than 2 year assignment required WSDG’s wide-ranging facility planning services. Beginning with documentation of the overall state of the property, they also covered room and structural acoustics measurements and schematic conceptual planning. The Design Development Planning stage included interior design by US-based company co-founder, Beth Walters. The scope of work included restoring the recording room to its favoured original acoustic performance. The new studio has already been dubbed the “Hollywood on the Danube” locally, and has been used by composer Hans Zimmer on several occasions. Earlier this year, Remote Control Productions chose Synchron Stage to record music for the upcoming Ron Howard-directed feature Inferno, which will feature a score by Zimmer. The new Netflix series The Crown, scored by Zimmer and Rupert Gregson-Williams, also made use of the facility. Zimmer also recorded the music for two new Volvo commercials, which were presented during the studio’s opening gala in July.

## Bernd, what is the Walters-Storyk connection?

**BM:** There are only six or so companies that can handle something like this, and they were the best. They gave us the right inputs and had the right acoustic philosophy I was looking for. I think finally it was the connection — they respected our needs — and had the know-how.

## Synchron Stage was almost demolished at one point, at what stage was the plan hatched to buy the place?

**BM:** When I met [Walters-Storyk partner] Dirk Noy, we were looking to make something like this, but it was a ground-up thing and it was planned to be much smaller at 300-400 sq. metres. Then Herb asked the ORF if they could imagine rehearsing at our new stage, and the CEO of the Radio Symphonie Orchestra said to Herb that they were selling this place ... and was he interested? The funny thing is that I had never seen the room before, I didn’t really know it existed because there is a concrete wall that was always down. There was a movable concrete wall that could be lowered, but because the motor was broken you couldn’t see this place. We were looking for a stage to do the MIR samples but we had a nice place here in Vienna all the time!

## “Hall 6” was built in 1940, but when was the whole complex built?

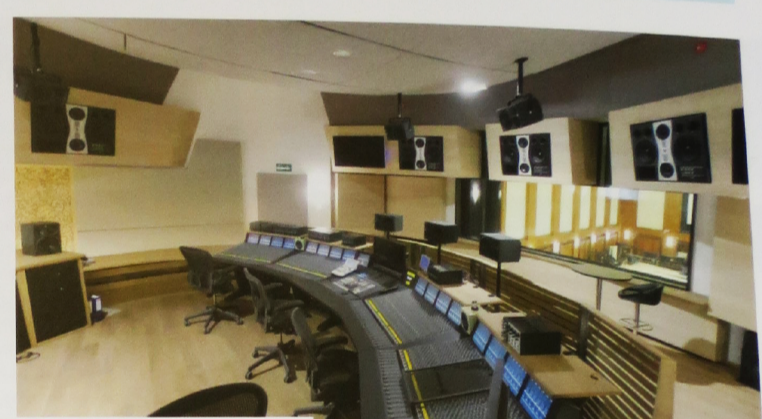
I think in 1925, it was built as a movie production complex, and they added to it over the years. The Nazis wanted to use this for their own propaganda films. They wanted to have a Synchron Stage built next to the film facility — and they also wanted an airport to bring the stars in — they thought the stars could do two films on one day. They had huge plans!

## You saw the potential of the big room, but how did you decide where you would put control rooms and have offices?

**BM:** The cool thing is it was originally built for what we now wanted to do once more ... it “told us” what to put where, mostly on account of the fact that you have these triple walls. The building was constructed exactly for the purpose we are using it. It sounds so good that we don’t have to change very much except for the floor (which was not the original anyway). We built room in room so we did not touch the original panels, we just had to remove the floor. We needed a bit of give and take from the planning authorities. They told us we cannot take out the floor or the walls, and we told them we have to do something. Of course, they were happy that a mainly derelict building would be used in the same way as was originally intended, so they made some compromises. In the 1960s and 1990s the building was reconstructed a bit, and at that time it was not a protected building. We have now restored it closer to what was ever attempted in the past. If you look at the size of the building — you have to invest so much money just to get cables running — the distances are great. You have kilometres of cables and then you have heating and cooling, many parts of which were from the 1940s and not up to the standards of today. We have had to renew all this completely from scratch.

## Gabriel, what was the most difficult part of the project?

**GH:** At the beginning, it was the historical preservation of the building. We had to find some common ground with the structural architects. The architects were extremely cautious — they told us ‘you can’t do this’ and ‘you can’t do that’. But we knew there were certain things we just had to do to make these rooms work acoustically. The other aspect was to get the HVC guys on the same page, so we could really get the performance of the HVC system that we



needed for these rooms. On another level it was quite an easy project because of the size of the rooms. The control room is so big it is really easy to manage certain aspects of acoustics, low frequency mode behaviour is occurring at extremely deep frequencies, and we have a lot of surface area where we can deal with it. We basically had to take care of reflection control and the overall RT, so that was probably the most straightforward aspect. The interesting part was to figure out how these rooms could correspond. How to lay them out so that we could work with Live A — and at the same time have these composers and pre-production working on Song B — arranging things so they can work together and maintain the flexibility in terms of sound isolation and all that.

## How would you describe the experience of working with VSL?

**GH:** The client was very knowledgeable. He knew exactly what he wanted — and that is always a big plus. It makes things easier if you know from the beginning that this is the sound they are looking for. The visual aspect was clear as well — a lot of clients just say: ‘I don’t know, I have no idea how it should look’. But these guys really knew what they wanted to do, so that was a pleasure.

## You were lucky because the building lent itself to being used in a particular way — it had certain strengths — so that’s not something you come across every day is it?

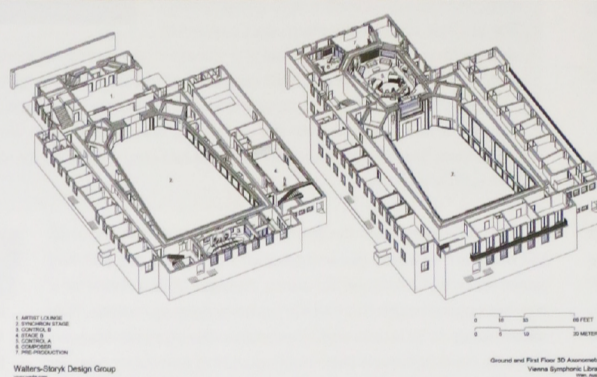
**GH:** That’s true, we didn’t have to start from scratch in terms of sound isolation but a lot of it was already there. We just had to improve it, and we had to re-model some of the things that were not done correctly at the time. Like the doors were not up to spec, so we had to replace them, but with respect for the architecture. Then the windows between Live A and Control A — 4 panes that had the exact same thickness which caused a huge resonance between the two rooms — we knew we had to get rid of at least 3 of those panes. We did measurements so we had an idea of what the effect would be of removing 3 of the panes. We took 3 out and put 2 new ones in. Because of the layout of the main structure we had to have 3 layers of glass between these 2 rooms, otherwise there would have been some leaks. There was a lot of documentation to be done at the beginning of the project. These historical preservation requirements: the authorities required documentation of the status quo, so we went through the whole facility and took measurements.

## What about the wood panelling?

It was built in the 1940s, and there should have been 20 carpenters to do the woodwork, but it was wartime so it was just 2 or 3 who did all the work. All the air conditioning was done by aircraft manufacturer Junkers, so the original air conditioning was delayed by a year. The 1940s cost should have been 250,000 RM, and at the end it was about 900,000 RM. Some things never change!

## Were there original design pages from when the building was built?

**GH:** Yes, we did debate putting it back to original state — is that possible? If that is not possible, what can we do? So that was a process that we usually don’t have to go through. It is interesting either ground-up construction, or the facility is not at all intended for studio use, so that was really interesting to dig back into this area and look at how they constructed a pre-eminent recording room.



## So all the wood is original, but is it true to how it looked before? Is there any insulation or trapping in the ceiling?

No, it’s just as it was, just the LEDs are new. We brought the acoustic panels back to their original position. They were 10cm further out, we found the construction plan from the original and it matched to a frequency we had measured where the RT60 was too long, so we moved them back to their original position. The room was mentioned in a vintage text book about membranes, and this is the magic behind the walls. They are all swinging at different frequencies — the bass frequency decay time is much shorter than the mids and the highs. As a result, the bass drum never masks the woodwinds or strings. We had an 80-piece orchestra in here, they all played and then the big drum was hit — very short and impulsive and never masking the piccolo.

## Herb — there’s been a change of business model: from generator of sounds to the capturing of sound for real productions. Are you a sampling company or a facilities provider?

**HT:** It would not have been possible to make this decision if we did not have our sample library development at the core, as this is what we are known for. We do not have to establish a brand. In the beginning we were a sample producing company, then we became a software company and we started to develop mixing software (the MIR concept) and now we took the opportunity to purchase this facility. If we combine everything with the utilisation of this room — which will be part of our next generation instruments — we will enable all our dry recorded samples to sit perfectly side-by-side with the live players here, and the new samples recorded here, so everything will work together. We have made enough impact now for the likes of Hans Zimmer to consider this might be the future of orchestral film production here in Vienna. He made a commitment to book the facility and more will come.

## There is another studio available, what will that be used for?

**HT:** Here we have a smaller B stage of 100 sq. metres, which can be used in parallel to the main hall. If someone doesn’t need the big room, but is doing a smaller rock/pop production, they can use the smaller room. The smaller control room is also an option if you are not recording a big orchestra, but just a chamber sized orchestra. The smaller control room is a generous 60 sq. metres, but is of course smaller than our main one. Paul Haslinger, an Austrian composer, said it would be great to have a studio configuration where you have the recording control room and a mixing control room, so you can mix your stems on the fly with different production teams, go right away to the second control room and make the mixes. The industry has to produce things so fast that sometimes this is needed. In the final stage, in 2-3 years we plan to have a fully specified dubbing stage here in-house as well.