



Embedded audio

With the integration of The Ones from Genelec, Dubidub has become the first Israeli studio to offer Dolby-spec Atmos capabilities



Dubidub CEO Ami Offir in the Atmos hotseat

ESTABLISHED IN 1999, DUBIDUB IS A MODERN STUDIO complex in Tel Aviv, offering Hebrew localisation, dubbing and post-production services for the TV, cinema, streaming, video-on-demand (VOD) and gaming sectors.

Its list of clients is truly impressive and includes such giants as Disney, Netflix, DreamWorks, Universal and many other esteemed companies. Founded by CEO Ami Offir and senior partner Tal Yardeni, Dubidub was born out of their genuine love and fascination for the audiovisual arts.

This passion shines through the second guests step inside the space. The pursuit for excellence and professionalism

has led Offir and his team to arguably become the leading studio in Israel in the industry of dubbing, localisation and postproduction sound design. The duo's high standards are also equally reflected in the studio's technical aspects, recently leading to the creation of "The Dream Room" – the first professional studio in Israel meeting Dolby Atmos specifications.

"The demand for Atmos in Israel has been rising, but no one is quite sure how long it will take to become the de facto standard here," explains Offir. "Atmos already completely dominates the theatrical industry, and most major global

companies are now producing their content in Dolby Atmos instead of 5.1 or 7.1. Streaming also has a big part to play in this transition. We want to be at the forefront of this movement and that's where the desire to create The Dream Room came from.

"The first goal with the space is to be sure that what you hear is as close to the truth as possible," he furthers. "One aspect of audio production that all music and sound production communities share is the fact that you can't control how the consumer will hear the final result. Your creations might sound great on good systems, but then terrible in semi-professional or bad setups, such as TV speakers. We do a lot of television work and VOD, and know most people are going to hear it through their TV speakers. As a result, our choice of monitoring setups is paramount to our ability to produce good results. Remember the Yamaha NS-10? It became so popular simply because it was a very good speaker in terms of overall balance representation."

To create this unique Atmos space, Offir called in David Huja, a highly esteemed acoustic consultant in Israel. Huja, who runs DHA Acoustic Design company, has supplied the full planning and acoustic design for all Dubidub studios since the first in 1999. Concurrently, Oded Goldberg, CEO of Kilombo, the Genelec distributor in Israel, worked closely with both gentlemen to provide the best possible audio solution.

"Our long-term partner and a greatly respected expert in acoustics, David Huja designed all the studios in the Dubidub complex," says Goldberg. "After installing Genelec monitors into another room of Dubidub studios, Ami was captivated by the sound. Before beginning the Atmos upgrade in the main studio, it was already clear to him that Genelec was the evident choice for establishing an Atmos setup of the highest level. He works with leading studios and media companies, and in terms of technical aspects, he not only uses the best equipment available now, but also strives to look into the future. When he decided to upgrade Dubidub to Atmos and



An additional pair of 8020BPMs provide stereo monitoring capabilities



The addition of height channels completes the Atmos experience



The listening area outside the new Atmos studio

create The Dream Room, not only did he want to precisely follow Dolby specification for the room, but he also needed an outstanding monitoring system that could match or even exceed the most sophisticated professional requirements."

Cabinets from the Finnish manufacturer's The Ones series of three-way coaxial monitors completely cover the head-height listening plane, with three 8351BW monitors serving as the primary L-C-R speakers and four 8331AW monitors acting as surrounds. For the top level, the preferred monitors were the 8330AW. Additionally, the space is equipped with an extra pair of Genelec 8020BPM, while two Quedest X15 subwoofers previously installed in Dubidub were retained.

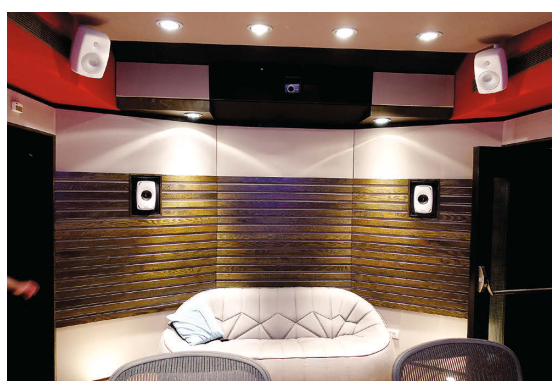
"We were confident that the results in the Atmos room would be impressive," furthers Goldberg. "Although the fundamental formula seems straightforward – an excellent room plus top-notch monitors equals an amazing result – actualising it can be quite challenging. It's all about making the right choices and involving professionals who can perform miracles. In our case, we had no doubts at all. Still, we were curious just how everything would materialise."

Having completed the basic design, Huja immediately encountered some challenges and approached Genelec R&D director Aki Makivirta for assistance. "The Ones speakers are meant to be hung on ceiling mounts or installed on a shelf or floor stands," explains Offir. "Long before we considered Atmos, the room was originally built as a 7.1 studio with other speakers embedded into the wall, whose apertures in-wall were customised specifically for them. At the time I thought we would be using those speakers forever. But having bought Genelec monitors for another studio in our complex, I fell completely in love with their sound. I told David that from now on we would be working exclusively with Genelec.

"We had Dolby specification support throughout the design process, which meant that proportions had to be accurate down to a degree, otherwise you will endure a lot of phasing issues, things not being in balance and frequencies jumping in and out. We followed Dolby standards, but that couldn't solve our speaker problem."

In order to physically integrate The Ones into the wall, extra equipment was called upon from Genelec. "We had to create some custom accessories and ordered Genelec flush-mounted kits for the 8351 models," Huja confirms. "The flush-mount solution was Aki's suggestion. Originally, we wanted to have the 8341s on the rear and the sides for

an Atmos 7.1.4 setup, but the openings in the walls were too small so we considered Genelec's 8331 instead. Since there is no flush-mount kit for the 8331, we had to custom build such kits locally, taking into consideration the air flow for the reflex energy and cooling the amp module. They could physically fit, but it meant we had to be very careful about the maximum SPL achievable from the system, as it's defined by the least powerful element. I checked the differences and the maximum possible to compare with average levels Ami usually works at in that room. After discussions with him about SPLs and desired headroom and careful analysis of the room, we understood the system will provide the studio's monitoring requirements and beyond."



The rear wall

The physical installation process ended up being no more straightforward than the design stage. "It was particularly interesting because we had to take down the ceiling acoustic treatment," shares Huja. "We didn't have preparations for installing the height speakers and I also had to find a different solution for the GLM's daisy-chain connections. We've split the main Cat5 cable coming from the GLM adapter via a simple splitter in the machine room, and then sent direct lines to each and every speaker. My understanding was that it's not sending network Ethernet information, it's just a way to approach a component with a specific ID. Aki kindly confirmed that approach would work.

"From an integration perspective, what I like about GLM is that the system setup is separated from the user interface. These days, most people either have a monitor controller

that can manage separate output levels, or they use audio interfaces that have DSP built in. I do the system setup and then disconnect the GLM and that's it. The system is hardwired, calibrated and locked, and my clients are freed from making accidental mistakes. We saw no acoustic reasons to change the existing Quedest subwoofers but, since there is no GLM on them, I had to do two-channel DSP calibration in hardware, also in a high resolution."

The perseverance of all parties paid off and the proof can now be heard. "Everybody knows it's one of the greatest studios in Israel," says Offir. "For a team of my engineers, it's kind of an honour to work here and to operate all of this fantastic gear. Personally, I'm so happy with the final result and so is David.

"I had a guest here recently from London, Yoad Nevo, who was very much involved with Waves at a high level for many years. He's a mastering and mixing engineer, and an Atmos guru, and at Waves he developed several surround and binaural products. Since he has a lot of knowledge and has worked on projects in many famous studios all over the world, I wanted him to teach me and my team more about Atmos. When visiting, he told me that we have something very special here and I can't think of a better commendation. The studio is lucky enough to be just the right proportions to be considered as one of the best Atmos-capable home entertainment studios, period."

"The Atmos Dream Room in Dubidub studios has been built to a very high standard, and the way the speakers are embedded and acoustically blended in the room creates a very transparent environment where you don't feel like you're looking at speakers and hearing different sound sources," agrees Nevo. "The monitors are blended in the room and this fact opens an immersive audio experience to you because you don't have to think and distinguish speakers as separate sources. The worst thing you can do, especially in surround, is when you have a sound, and you turn your head and look at the speakers. That's what you always want to avoid as a mixer."

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