



Building A Sonic Paradise For Recording Artists

How Firdaus Studio, part of Expo City Dubai, redefines the power of collaboration

*The **Firdaus Studio** by A.R. Rahman, located at Expo City Dubai, is a state-of-the-art recording space and home to the trailblazing all-female Firdaus Orchestra. Led by Her Excellency Reem Al Hashimy, UAE Minister of State for International Cooperation and the CEO, Expo 2020, the studio is nestled within Expo City Dubai. The Firdaus Studio by A.R. Rahman stands as a beacon of innovation in the world of music production. In this article, PALM Magazine explores the making of the musical maestro's magnus opus in the recording landscape.*

Envisioned by Oscar-winning composer **A.R. Rahman**, the facility represents a significant milestone in Dubai's journey towards becoming a cultural epicenter.

Once the idea of Firdaus Orchestra started coming to life, Rahman anticipated the need for the ensemble to have a recording and show venue, the largest in the Middle East, equipped with the finest technology – modern-day, spacious, and multipurpose. The vision for the Firdaus Studio came into existence. He wanted to create a space for artists that was boundary-less, a center of creativity. "I wanted to create a space that would inspire performing and learning as well as serve as an interactive hub for music expression," says A.R. Rahman.

Building The Studio From Scratch:

Modi Digital, led by **Aditya Modi**, along with his partner, Rolins Thomas Ray, infused Rahman's vision with life. "The studio was being built in a brand-new city that

Dubai was developing as a part of Expo 2020, now Expo City Dubai. The timeline to complete and handover the project was extremely stringent (under one year of build time)," shares Modi, Designer and Head of Firdaus Studio. "This was the main challenge we faced - apart from this, since it was a ground up purpose-built facility - we designed it from scratch with all things considered."

Reflecting on his team's resilience, Modi continues, "Dubai is an extraordinarily fast city - a city that has developed to its current state in 50 years. Given the timeline within which they have achieved everything, the studio build timeline was something they were completely used to and, to my surprise - it was easily achieved. Their efficiency and resources are amongst the best I have ever come across, and this was how we overcame this hurdle."

The core idea behind the acoustic design at Firdaus Studio was versatility and adaptability. The Studio needed to stand as a true representation of Dubai, UAE and needed to be multi-cultural and diverse in all ways. "We wanted to reflect this diversity in our design approach by being capable of adapting to all styles of music, use cases, and modes", says Modi.

Sound Design & Acoustic Treatment:

The first and one of the only studios in the Middle East to be Dolby Atmos HE-certified, the facility boasts of a variety of international associations within two years since its inception. The 12,000 sq. ft studio space includes a Live Room, a Control Room, two Green Rooms and two Lounges. Using a tightly integrated IP based audio/video system, the rooms in the studio allow for flexibility of unique working

modes specific to artist requirements.

The Firdaus Studio is designed to have an adaptive acoustic system, based on electro-acoustics and mechanical-acoustics, where motorised panels, ceilings, drapes, and DSP can modify the rooms tonality to adapt to any kind of music requirement, or shift between various modes such as Cinema mode, Event mode, Shoot mode, or Recording mode.

Equipped with state-of-the-art recording/mixing/mastering equipment, Firdaus Studio is designed to deliver efficient seamlessness for recording artists, sound engineers, mix/mastering engineers, and more.

An avant-garde recording facility, the studio caters to international audiences, and artists of all musical styles with state-of-the-art equipment. The Main Control Room includes a state-of-the-art analogue input stage with the flexibility of digital control with a unique hybrid desk consisting of a 40-channel Neve 5088 analogue console, embedded with an Avid S6 control surface. The last 5088 console by Rupert Neve himself, this hybrid mixer allows artists to use the best of both worlds for superior sound. The Studio stands as one of the most technologically updated studios in the world.

The unique Scoring Stage/Live Room accommodates up to 80 musicians, offering variable acoustics with moveable panels, truss, and drapes to adapt to various modes. With its world class equipment, the studio swanks a range of over 300 microphones, some of which include top-of-the-line models of **Myburg, Chandler, AKG, Neumann, Sennheiser** and **Shure** to name a few. Multiple inbuilt and remote controllable PTZ Cameras enable remote collaborative real time sessions, as well as



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seamless communication across facility and online sessions, and capture sessions for archival & posterity. The studio team comprises of skilled in-house Audio Engineers from around the world with diverse musical backgrounds, equipment mastery and precision of art.

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The Live Room extends beyond a recording space with its multimedia capabilities becoming a venue for events, concerts, film screenings and filming. Fitted with

a Christie 4K projector and a Seymour Screen, the studio can be turned into a cinema mode, with theatre style seating. "The Firdaus Orchestra did a full live digital performance out of the studio using studio, streamed on YouTube.

The Control Room forms the heart of the Firdaus Studio, a space fitted with cutting-edge, hybrid desk consisting of a 40-channel **Neve 5088 analogue console**, an **Avid S6 control surface**, and more.

The audio was managed in the main Control Room, and the video production was setup in the **Auxiliary Control Room**. "Our versatility and adaptability to the needs of the artists is what makes us unique", comments Modi, "The screening of Firdaus Orchestra's docu-concert, The Relinvent Series was held at the Studio, which hosted influencers and media for a classic movie experience." Apart from film screenings, this mode is also great for recording film scores as it enables composers and producers to hear their movie prior to release as the audience would.

The studio is made of a variety of equipment. Some of the equipment, like the Rupert Neve console, was sourced straight from the manufacturer. A lot of the other equipment was sourced from distributors including NMK and AVI-SPL, which are locally-based, making logistics easier as well.

The Future Roadmap For The Firdaus Studios:

This sonic paradise is ideal for advanced production and mixing sessions, offering multiple monitoring formats including **Dolby Atmos**. The studio's integration seamlessly blends audio, video, and networking technologies to create a dynamic and flexible creative environment. Firdaus Studio's forward-looking approach extends to cloud solutions, enabling intercontinental recordings and data backup. "An artist can sit in any of the rooms at the studio and record music and talk back to and from the live room", says Modi.

"The Firdaus Studio stands as a representation of Dubai, UAE, the studio intends to be a space with no boundaries for artists and cultures from across the world", continues Modi.

The Firdaus Studio intends to act as the catalyst to support that dynamism, and for the Middle East overall, to be the first point of contact for artists. To become the home venue for recordings, events, workshops, and artists. For it to



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become a place to create and to learn. The portfolio of the Studio includes artists including **Coldplay, Ben&Ben, Illaiyaraaja, Netflix, Lindsey Lohan** and more.

Looking ahead, Firdaus Studio envisions a strong educational component,

Firdaus Studio’s Inventory:

CATEGORY	BRAND	ITEM	QUANTITY
MICROPHONES	AEA	AEAR84A	2
	ASTON	ELEMENT, SPIRIT BLACK BUN- DLE, STARLIGHT, STEALTH	2
	AKG	C414 XLS (STEREO SET), D12 VR, C451B (STEREO SET)	1
	AKG	C1000 S	2
	SE ELECTRONIC	HARP BLASTER, VKICK	1
	SE ELECTRONIC	X1S	2
	DPA	4011A 2X + 3X 4006A	1
	NEUMANN	M149, U87, KM 184 STEREO SET	1
	NEUMANN	TLM 103 STEREO SET, U67 SET, TLM 107 BK STUDIO SET	2
	AUSTRIAN AUDIO	OC818 LIVE SET (MATCHED STEREO PAIR)	1
	PELUSO LABS	P12 (ACOUSTICALLY MATCHED)	2
	FLEA	FLEA 47 TUBE	2
	FLEA	FLEA 50	3
	TOWNSEND LABS	SPHERE L22	1
	SLATE	VMS ML-1 VINTAGE EDITION, VMS ML 2	1
	SCHOEPS	FLEXI SET CMC6 + MK4 + MK, FLEXI SET CMC6 + MK4 + MK, CMC6 + MK5 STEREO SET	1
	SCHOEPS	CMC1 U Preamp	3
	SENNHEISER	MD421II, MD441U, E906	2
	SENNHEISER	E908B, E908B EW, E908 D, E602 II, AMBEO, E901	1
	SENNHEISER	MKH800 TWIN	3
	SHURE	SHUBETA57A, BETA 56, SHU- BETA58A, SM 57, SM 58-50th Anniversary	3
	SHURE	BETA 52, SM7B	1
	SHURE	MX418SC, KSM 137 (MIC), KSM 32 (MIC), ULXD 1 w Bolt Pack, P10R	4
	SHURE	KSM8 NICKEL, BETA 57A (MIC), BETA 56 (MIC), SM 57 (MIC), SM 58-50th Anniversary, UL X D 2 w KSM8, ULXD 2 w BETA 58, ULXD 4 w Receivers, P10T	2
	SHURE	SM81LC, PA 821B Antenna Combiner	1
	SHURE	BETA 98 A B/C, RPM 626 (PREAMP)	5
	SHURE	BETA 98 HC (MIC)	6
	ROYER	R122 MKII	2
	MOJAVE	MA1000	3
	MOJAVE	MA 300	2
	TELEFUNKEN	ELA M 260 Tube Condenser Stereo Set	1
	COLES	4038	4
	LINE AUDIO	CM4, OM1	6
	MANLEY	MANLEY SILVER	1
	OKTAVA	ML52-02 MATCHED PAIR	1

including workshops, sound engineering courses, and collaborations with cultural institutions worldwide. With its vision and unwavering commitment to excellence, Firdaus Studio aims to be at the forefront of the global music recording industry, shaping the future of music production.

CATEGORY	BRAND	ITEM	QUANTITY
	GRANELLI AUDIO LABS	G5790	2
	SONY	ECM100U	2
	CHANDLER	REDD	2
	SOLOMON MI- CROPHONES	LOFREQ DARU JONES Edition	1
	BEYERDYNAMIC	M88 TG (MIC)	2
	AUDIO TECHNICA	ATM350A, PRO 35	4
	EARTHWORKS	DK7 FULL SET	1
	ELECTROVOICE	RE-20	2
	MESANOVIC	MODEL 2A	2
MONITORING		CONTROL ROOM	
	ATC	ATC SCM300ASL PRO (IN WALL)	2
	GENELEC	S360 (White) DOLBY ATMOS 7.1.4 SETUP	11
	GENELEC	7382A (SUB), 7380A (SUB)	1
	EVE AUDIO	SC 3070 (NEAR FIELD)	4
	EVE AUDIO	TS 112 (SUB), TS 110 (SUB)	1
	KII	KII THREE WITH KII CONTROL	2
		LIVE ROOM	
	JBL	THEATRICAL SPEAKERS 9.1.6	22
	YAMAHA	CONFERENCE TALKBACK SPEAKERS	2
	BOSE	SHOWMATCH LINE ARRAY (6 Tops, 2 Subs)	1
		HEADPHONES & COMS	
	AUDIO TECHNICA	ATH M70X	2
	AUDEZE	LCD-4	1
	SENNHEISER	HD600	2
	HEAR TECHNOL- OGIES	HEAR BACK PRO MIXER	40
MIXING CONSOLE			
	RUPERT NEVE	40 CHANNELS 5088	1
		24 CHANNELS OF SHELFORD 5052	32
		16 CHANNELS OF 5012 (8x2 stereo)	16
	AVID	S6	1
	WAVES	E-MOTION LV1	1
MIC PRE/CONVERTER			
	RUPERT NEVE	24 CHANNELS OF SHELFORD 5052	40
	RUPERT NEVE	16 CHANNELS OF 5012 (8x2 stereo)	16
	AMS NEVE	16 CHANNELS OF 1073 OPX	16
	MERGING	64 CHANNEL HORUS	64
	AVID	48 CHANNELS OF AVID MTRX	48

* Outboard Gear is from Tube Tech, Rupert Neve, and MCDSP

* Instruments are from Steinway, Yamaha GTR, Amplifiers are from Kemper, Fender, Orange, and Mesa Boogie

* For the software, the DAWs are from AVID, Apple, Ableton, and Steinberg. The Plugins are from Sonible, Kazrog, Vienna Symphonic Library, Waves, Softube, Izotop, Audeze, Antares, Universal Audio, Slate Digital, Native Instruments, Dolby, and more.

* Lights and Cameras are from Newtek, Hedgehog, Ayrton, and Christie