



**Abbey Road Studios**  
CFX CONCERT GRAND

Garritan.



## TABLE OF CONTENTS



5



WELCOME

7



INTRODUCTION

9



GARRITAN

11



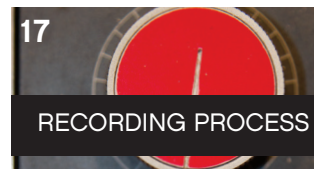
ABBEY ROAD STUDIOS

15



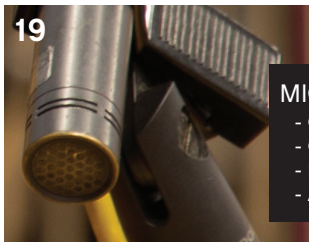
YAMAHA CFX CONCERT  
GRAND PIANO

17



RECORDING PROCESS

19



MICROPHONE PERSPECTIVES

- CLASSIC
- CONTEMPORARY
- PLAYER
- ADDITIONAL PERSPECTIVE NOTES





## WELCOME TO THE GARRITAN ABBEY ROAD CFX CONCERT GRAND PIANO

Even casual music fans know of London's iconic Abbey Road Studios. Their acclaimed acoustics, engineers, and equipment have played a vital role in countless legendary recordings, from the Beatles, U2 and Pink Floyd, to blockbuster films, celebrated classical performers, and beyond. Musicians from around the world turn to Abbey Road Studios when they require the very best.

The Abbey Road Studios legend continues to grow as their award-winning engineers masterfully blend the latest technology with legendary equipment and acoustics. This “best of both worlds” approach also drove the design of the remarkable Yamaha CFX Concert Grand Piano. The crowning masterpiece of the Yamaha piano line, the CFX has elevated the art of piano making.

We're honored that Abbey Road Studios has chosen Garritan/MakeMusic as a partner; I extend my special thanks to Mirek Stiles and the good people at Abbey Road Studios. Many thanks, also, to Yamaha for providing this remarkable instrument.

The Garritan Abbey Road Studios CFX Concert Grand Piano faithfully reproduces this stunning piano as recorded in Abbey Road Studios' legendary Studio One. It simply does not get better than that. Play today and experience a power, richness and clarity that is unmatched.

Musically yours, Gary Garritan



## INTRODUCTION

The Garritan Abbey Road Studios CFX Concert Grand places you on the bench before a remarkable concert grand piano that is characterized by a wide palette of tonal colours and an ability to create the most subtle, expressive nuances. This beautiful instrument is matched with the stunning acoustics of Abbey Road Studios' historic Studio One and the finest collection of microphones in the world. The Abbey Road Studios engineering team provided their own interpretations of piano recording techniques, developed over years of experience covering a wide variety of genres and musical styles. Garritan has combined these ingredients to create the finest sampled piano ever captured, offering a wealth of creative possibilities.







## GARRITAN

Recording the CFX piano was only the beginning! Garritan's role in this unique partnership was to transform over 50,000 samples into a powerful and unrivaled software instrument.

Garritan's focus is on the human elements of music and live performance, with a commitment to making high-quality, expressive software instruments within the reach of every musician. Garritan's pioneering work includes industry "firsts," such as the introduction of the orchestral super-library utilizing hard disc streaming of samples, support for notation software, the use of convolution for soundboard resonances and sustain resonance, harmonically aligned samples for seamless crossfading, and much more.

Garritan's dedication to accessibility and excellence is epitomized in the CFX Concert Grand library. Without this new virtual instrument, few would have access to Yamaha's phenomenal CFX concert grand piano, let alone the opportunity to record in Abbey Road Studios' historic Studio One with the greatest technicians and recording equipment in the world.



## ABBEY ROAD STUDIOS

The Yamaha CFX piano was recorded at Abbey Road Studios, the world's first purpose-built recording studios. Opened on November 12, 1931, the studios have been at the heart of the music industry for more than 80 years and have been the location of countless landmark recordings and pioneering developments in recording technology.

Abbey Road Studios' Studio One is one of the largest and most beautiful sounding orchestral studios in the world. The space can easily accommodate a 110-piece orchestra and 100-piece choir simultaneously. Studio One's acoustic is as famous as its location, offering a supremely warm and clear sound with a reverb time of 2.3 seconds. This makes it perfect for numerous types of recording, from solo piano to large orchestras.

Studio One is Abbey Road Studios' largest recording space and has enjoyed a remarkable history. Architects Wallis Gilbert and Partners decorated the walls of Studio One in their distinctive art-deco style and in 1931 the impressive room hosted Abbey Road Studios' inaugural recording session with Sir Edward Elgar.



**Studio 1**  
**Studio**

Please turn mobile phones off  
Do not enter when red light is on





## ABBEEY ROAD STUDIOS

Originally designed to capture live performances, Studio One was able to accommodate a full orchestra on a specially designed stage in front of a 1,000-strong audience. It remains the world's largest purpose-built recording facility, but the evolution of health and safety restrictions means it is now limited to a more comfortable capacity of 400. The stage is now gone and the art-deco walls have long been replaced by acoustic paneling, but the vast room is no less impressive. The control room in Studio One has been moved and reconstructed on a number of occasions. Its current incarnation was built in the spring of 2001 and houses a 72-channel Neve 88 RS console.

When Studio One opened, it was used exclusively by EMI's prestigious His Master's Voice (HMV) label and it continues to host classical recordings to this day. The room is now also used to record live concerts and scores to some of Hollywood's biggest films.



## YAMAHA CFX CONCERT GRAND PIANO

In 1991, Yamaha began its most ambitious piano project ever: to create a new generation of grand piano for concert, conservatoire and studio performance. What followed was nearly 20 years of development and evaluation.

A 40-strong team of the world's most talented piano designers, technicians, craftsmen and, of course, pianists deconstructed the concert grand and began rebuilding it from the ground up. Every aspect of traditional piano design was questioned, evaluated, improved, and relentlessly tested. Once the design was nearing completion, multiple prototypes endured thousands of hours of secret testing at concert halls across the globe.

The result was the CFX Concert Grand Piano, a revolutionary instrument. Each CFX is entirely hand-built by a small team of the world's most experienced and skilled craftsmen. All materials are meticulously selected and refined to ensure unprecedented music performance in the most demanding of situations. It offers outstanding expressiveness for a truly musical performance. With enough tonal presence to be heard over the sound of a full symphony orchestra in the largest of concert halls, the CFX is truly one of the greatest pianos ever created.



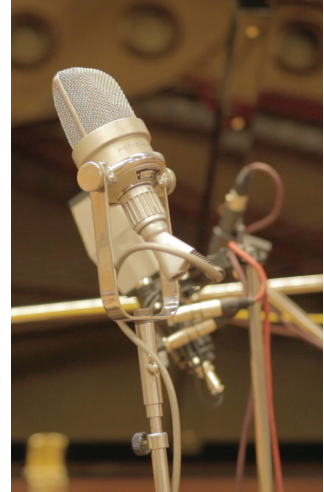
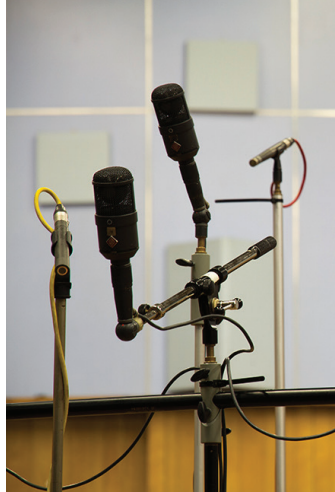


## RECORDING PROCESS

The sound of the CFX Concert Grand piano was captured by a team of highly experienced Abbey Road Studios recording engineers, each contributing decades of knowledge in recording pianos for a variety of applications.

Microphone set-ups, also referred to as perspectives, have a huge effect on the overall sound of the recorded instrument. Each set of perspectives speaks specifically to various musical settings.

The set-ups are a hybrid of classic techniques handed down from generation to generation of balance engineers within Abbey Road Studios, mixed with more contemporary and experiential arrays that perfectly complement each other. These set-ups have been and are continually used by the finest recording artists in the world and have been presented here for use as a sampled instrument for the first time ever.



## MICROPHONE PERSPECTIVE: CLASSIC

The Classic perspective most faithfully captures the natural tonal character, clarity and nuance of the instrument.

### CLOSE – NEUMANN M49 (2) AND NEUMANN KM184 (2) MICROPHONES:

The M49 and KM184 are used to capture a close detailed sound, which is especially good for chamber music.

### MID FIELD/WIDE – DPA 4006 MICROPHONES (2):

The DPA 4006s placed at each end of the piano create a wider and more spacious sound picture.

### MAIN – NEUMANN TLM50 MICROPHONES (2):

The Neumann TLM50s are placed 2 m away from the instrument and at 2.6 m in height. This captures the overall complex frequency response and dynamic range of a grand piano.





## MICROPHONE PERSPECTIVE: CONTEMPORARY

The Contemporary perspective creates a piano sound that is bright and hard with lots of attack from the hammers, but also maintains the piano's warmth with intimate ambience.

### CLOSE – AKG C12 & D19 MICROPHONES:

The AKG C12 is a bright sounding valve microphone with bite and some nice valve warmth. The mono D19 placed in the centre over the hammers was run via a classic REDD47 valve microphone preamp, adding central focus and 'poke' to the close sound of this set-up.

### AMBIENCE – SCHOEPS MK 2H MICROPHONES:

For the Ambience microphones, Schoeps MK 2H are used in a close position. They are able to bring the sound of the room to the mix, without losing too much of the definition of the piano's initial attack.



## MICROPHONE PERSPECTIVE: PLAYER

The Player perspective offers the experience of playing the CFX from the piano bench in Studio One, particularly when reproduced over high quality headphones.

### CLOSE – NEUMANN KM84 MICROPHONES (2):

This is a straight forward stereo pair placed closely and directly over the hammers. It provides an immediate sound of the piano with little coloration from the room.

### PLAYER - NEUMANN KU100 DUMMY HEAD:

The Binaural KU100 Dummy Head was placed directly behind the musician's head. This provides an intimacy to the instrument, mixed with the unmistakable sense of playing the instrument in the acoustics of Studio One.

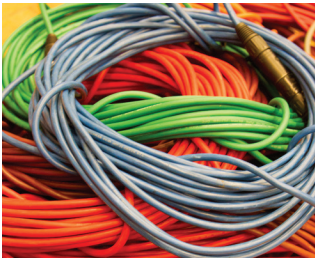
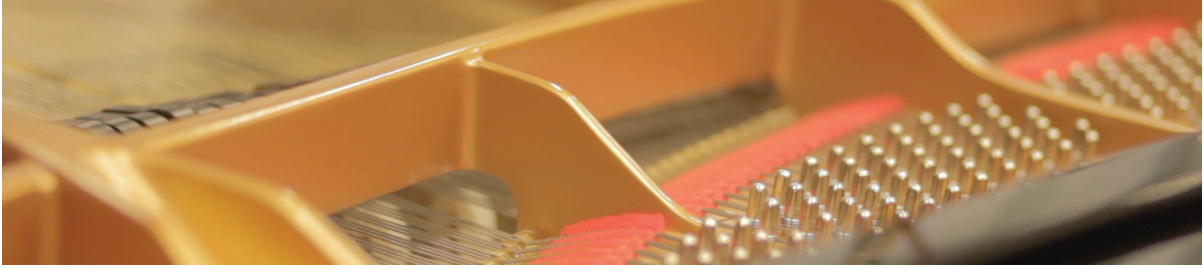


## ADDITIONAL PERSPECTIVE NOTES

The lid of the CFX when fully open is about 80 cm. For these sampling sessions, the lid was extended by a further 50 cm. This technique is favored by some of the engineering team at Abbey Road Studios as it gives a more balanced and open sound from the piano in recording situations. The extension also allows the pianist to hear the same sonic qualities from a player perspective as from the audience perspective. The music stand was also removed from the piano to avoid any unnecessary reflections and to allow greater flexibility for microphone placement.

One of the finest concert piano technicians in the world, Peter Salisbury, was on hand throughout the entire sampling process to ensure the instrument was captured in the best possible condition. The sampling process was played by a top London session musician to enable complete stability across the velocity layers and capture the sound of the instrument as performed by an expert. All analog to digital conversion was completed via Prism ADA-8 interfaces.





## CREDITS

Abbey Road Studios

**Executive Producer:** Mirek Stiles

**Recording Engineer:** Andrew Dudman

**Recordist:** John Barrett

**Musician:** Sally Heath

**Piano Technician:** Peter Salisbury

**Marketing Photography:** Alexis Chabala

**Session Photography:** Holly Pearson

MakeMusic | Garritan

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