



artone studio

**CAPTURING THE
MAGIC OF THE MOMENT
IS THE GOAL OF EVERY
RECORDING ENGINEER,
PRODUCER OR ARTIST.**

**CUTTING AN ALBUM DIRECT-TO-
DISC WITHOUT THE INTERFERENCE
OF AN INTRUSIVE INTERMEDIATE
RECORDING MEDIUM, I.E. THE
TRADITIONAL WAY TO CAPTURE
RECORDINGS BEFORE TAPE ARRIVED IN
THE LATE 1940'S, DOES EXACTLY THAT
AND ARTONE OFFERS THIS TIMELESS
AND NOW UNIQUE TECHNIQUE.**

The studio in Haarlem, 20 minutes from Amsterdam city centre, houses an amazing collection of fully-restored vintage analogue recording, mastering and cutting equipment sourced from a variety of historic world-famous studios.

About the Studio

Artone Studio opened in 2018, marking the 20th anniversary of Record Industry, Europe's vinyl pressing plant in the Netherlands. For over five years, our team, led by British producer/DJ David Hill, sought out vintage valve gear of the 1950s-1970s that had made iconic recordings in legendary studio's around the USA and UK.

We created a live room and mastering space designed for live performances. A state of the art, high fidelity, live recording space utilizing high-quality modern and vintage analog recording and mastering techniques and equipment. We aim to create recordings that capture the energy and direct sound of a live performance, with the warmth and depth of the pre-transistor, pre-digital era.

Much of the equipment is the highest standard recording, mastering and cutting equipment ever made, including vintage high-end mics such as Neumann M49 and Neumann and Scully cutting lathes, Westrex and

Grampian cutting gear. Some of it is extremely rare - and in some cases absolutely unique. The equipment was meticulously restored and brought back up to original specifications and installed in Artone. The RCA 76D mixing desk is one of only four remaining of the type - one of which was used at Sun studios. Our Westrex Capitol cutting amps were designed uniquely for Capitol studios and were used for the Beatles, Beach Boys and Frank Sinatra US recordings. The RCA 74B microphones were specifically designed by RCA for internal use and were never offered commercially. And some of our equipment, such as the Reeve Sound portable mixing desk and our [Cinema] limiters, came from Hollywood studios, that had significantly bigger budgets and better quality gear than the music industry could afford in the 1950's.

The space was acoustically designed by Jelle van der Voet of Pinna Acoustics, who also has designed for Wisseloord, Martin Garrix and Afrojack amongst others.



OUR LIVE ROOM WITH ACOUSTIC WALL PANELS TO ADJUST REVERBERATION TIME





TREE AUDIO ROOTS CONSOLE OVERLOOKING THE LIVE ROOM



MASTERING STUDIO WITH THREE CUTTING LATHES AND ON THE LEFT SIDE 'TUBE ONLY' EQUIPMENT

Artone Studio offers the possibility to make a direct-to-disc recording, the standard way of recording up to the 1950s. Music was performed live, in one take and was cut directly onto analog disc, without any technical interference. When magnetic tape became the industry standard, direct-to-disc became obsolete. Tape offered lower cost, and much higher versatility, and, over time, the ability to record multi-tracks.

Direct to disc recording resurfaced in the 1970s, mainly thanks to audiophile labels that acknowledged its rewarding features: the ability to capture the magic of the moment. The spontaneity of a once-in-a-lifetime performance. The concentration and skill required of artists and engineers to "get it right in one take" also creates a challenge which many artists relish. Direct-to-disc recordings offer an accuracy of the sound and direct energy that is lost in multi-track recordings. Artone Studio is reviving this recording technique using the best high fidelity equipment and making it accessible to a new generation of musicians. Additionally the studio offers the option of multitrack recordings via Pro Tools and with high resolution options up to 384kHz / DXD, thus embracing the best of both worlds: vintage as well as the latest digital techniques.

The name Artone Studio is a tribute to Record Industry's roots deep in the 1950s. Artone was the original name of a pressing plant and record company in Haarlem. The factory was later sold to CBS, which later became Sony Music. In the 90's, when vinyl sales were at an all-time low, Ton and Mieke bought the pressing plant, saving it from closure and in 1998, Record Industry was born. Convinced that there would always be a demand for vinyl, the new owners invested in machinery and staff.

Twenty years later, with the couple still at the helm, Record Industry is one of the biggest, most modern pressing plants in the world and its reputation for high-quality product is recognized by industry insiders, musicians and consumers worldwide. Although throughout the years many technical innovations were implemented, the staff at Record Industry never forgot it's all about the music. It was a natural step for Record Industry to establish Artone Studio within its ever-expanding facility. Artone is a place where artists from across the world will feel welcomed and where they use technology that has withstood the test of time. It's a new and exciting chapter in the long and illustrious history of the company.

READ ALL
ABOUT
OUR

Recording and Mastering Equipment

CONSOLES:

RCA 76D mixing console

The 76D was a special version of the RCA tube mixing console famously used at Sun Records for the Elvis, Johnny Cash and Carl Perkins recordings. We are told that only a dozen or so of the consoles were ever made, and only four are known to survive – one is in a museum in Memphis, and the other two are rusted and owned by a collector.

The 76D was so rare that it did not even get its own manual, instead the 76D is an addendum to the 76C manual. The 76 was originally designed as a mono console, but the 76D variant is unique in that it is two buss with two meters so it can be

used for two outputs. It was common at Sun for them to record separate tracks to the two tracks of a stereo tape machine.



Tube consoles built for stereo in the US are not common since most stereo consoles were in the solid-state era. This one has 6 mic inputs and two line inputs.

The Tree Audio Roots Gen II

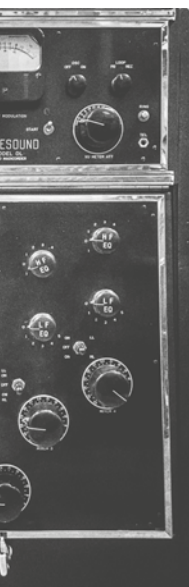
is a sixteen-channel and eight sub mixer tube and hybrid, full-featured recording console based around an all tube channel strip design. The console is hand-built in the USA. Tree Audio console users; Grammy-nominated Engineer/mixer, Helik Hadar, Jazz legend Herbie Hancock, Grammy winning producer/musician, Larry Klein, Red Hot Chili Peppers, Johnny Cash, Bob Dylan, Harry Connick jr, Sheryl Crow and many more.

Two Maselec MTC-1X (modulation and preview unit), custom made for Artone Studio.



non-VCA design

Reevesound DL PM Magicorder is designed as a mono mixer with a single output buss, single meter, and a single output amplifier. It has the same electronics and signal chain as the main Reeves console used for the Riverside sessions, but in a portable package that could be moved around. It has four mic and four line inputs, but only four of either can be mixed at any one time. It was fully restored with all new caps. There is high and low EQ on each channel, similar to the 8-track install Reeves console. It uses 5 pre-amps that are rare Altec copies of a Western Electric design and it is the sole remaining Reeves console in existence



EMT 240 Gold foil reverb plate.

For many years this plate has been used for artificial reverberation and it has proven excellent in use by many recording studio's worldwide.



MICROPHONES:



Neumann U67 - Return of a legend. Introduced in 1960, the U67 was the quintessential studio workhorse throughout the formative years of modern music. Today, more than ever, its inimitably smooth sound continues to be in high demand.

The **Neumann U 87 Ai** is probably the best-known and most frequently used studio microphone all over the world. Its smooth and refined sound is as iconic as its elegant exterior design. The U 87 Ai is the standard microphone for speech and vocals. Three polar patterns plus pad and low cut options make it adaptable to a wide range of applications.

Neumann 254 microphones (Pair) a small diaphragm pressure gradient condenser microphone (Tube) - cardioid / EMF/HF Sealed

Neumann KM76 microphone a pressure gradient condenser microphone (Transistor) - switchable polar pattern: cardioid / omni-directional / figure of eight



Neumann M49 microphone large diaphragm pressure gradient condenser microphone 1960 (Tube AC701k) - switchable polar pattern: cardioid / omni-directional / figure of eight (Grimm Audio Power Supply)



RCA 74B microphone Ribbon microphone (1930 -1950) - velocity transducer figure of eight frequency response (50Hz-9kHz)

STC / BBC ribbon microphones Ribbon microphone - velocity transducer figure of eight, produced by Coles Electroacoustics. The microphone was designed and patented by the BBC in the 1953 and was originally known as the STC 4038. The sound of the microphone has been described as "British" with a "BBC politeness", and its appearance has been likened to that of a waffle iron.

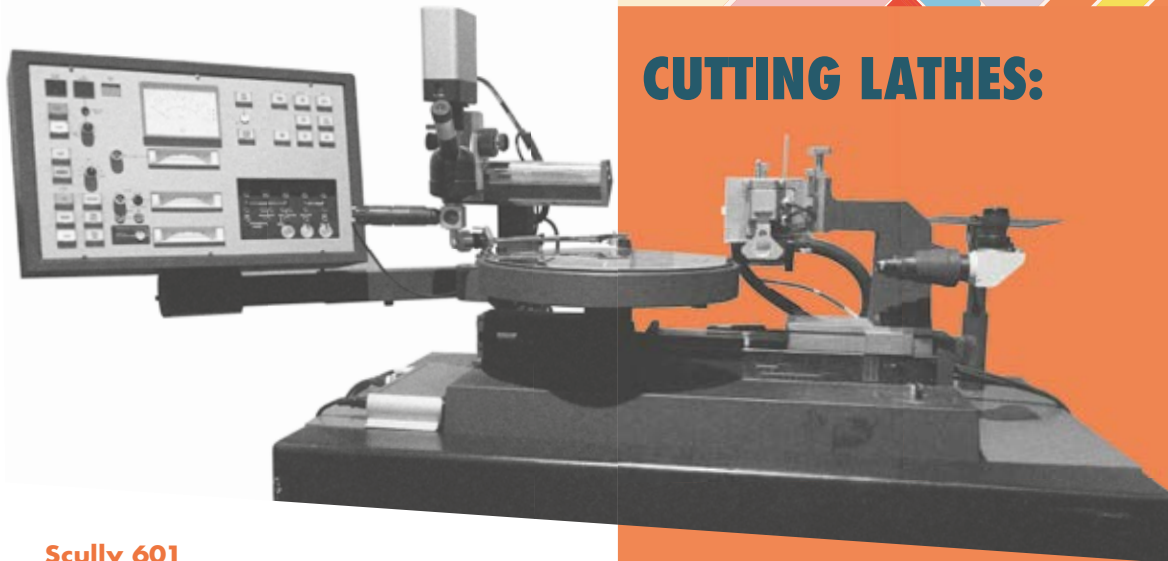


Altec 21B Coke bottle mic small diaphragm pressure condenser microphone (+-1949) (Tube 6AU6) - omni-directional

TAPERECORDERS:

Studer A80 is one of the very best analog tape recorders. But this isn't a normal A80, it is the mastering version. Usually, you would expect to see three heads - erase, record and play - set very close together underneath a head cover that makes everything look neat and tidy. But here there are two playback heads, separated quite widely.

The Studer C 37 Magnetic Tape Recorder is an all tube tape recorder of the most up-to-date design-conception and can be regarded as setting a mile-stone in the art of magnetic sound recording.



CUTTING LATHES:

Scully 601

Scully was America's leading manufacturer of Lathes for cutting LP masters during the 40s and 50s. Many sought after fantastic sounding records (Blue Note, Prestige or RCA Red Seal) have been cut on a Scully 601.

Neumann VMS 70

The VMS70 is the most produced lathe ever made. With German precision these lathes are still the industrial standard in cutting vinyl masters, together with the SX74 and more powerful SAL74 rack this lathe sets the reference since more than 40 years.

Neumann VMS82

Direct Metal Mastering - aka DMM - was the final refinement in vinyl mastering technology issued by Neumann in cooperation with Teldec and Toolex in 1982. Only 23 lathes ever made (16 survived and are still being used). One of the advantages of cutting into copper is the negative can be taken straight from the cut without the silvering process which results in more quiet cuts.

Westrex 1574B cutter-head amps

Pair of 1960s cutter-head amps as used by Rudy Van Gelder from the early 1960s.

Cinema Engineering 6517C passive high-pass/low-pass EQ

1950s Cinema Eng. adjustable passive EQ for hiss and rumble reduction, also known as a 'Sound Effects Filter', and is a high-pass and has a low-pass filter both built into a single instrument. It was the most common EQ used in the 1950s and 60s for disc mastering from tape. It uses tuned coils for the roll-offs and compliments the Scott active tube noise reduction unit. The units are mono - we have a pair for stereo use. In addition to dealing with noise, they are also useful to pre- or post- filter audio going to a reverb plate or chamber. They do not have a make-up amp, but the way they are designed, there is not a huge loss (loss value tbc).

Cinema Engineering 4031B passive programme EQ + make up gain pre-amps
The most common EQ in tube-era recording studios, but they were not used much outside of recording so they are still fairly uncommon today. These were from Capitol studios NYC. They are very nice, clean sounding EQs and are also suitable for non-vintage recording work. The amps make up the loss of level in the program EQs and they should be used together.



SPEAKERS:

The **PMC MB2S speaker** is perfect for mid sized control rooms either soffitt mounted or on its custom studio stands. The MB2S allows higher SPL's without distortion and loss of definition normally associated with a device of its size. The distinctive MB2S includes the PMC 75 mid driver that has taken the limits of soft dome design and construction to its ultimate conclusion.

AMPLIFIER:

The Bryston 14BSST2 PRO dual channel (stereo) amplifier is basically two 7B's which have been combined in a dual mono modular design and has the power to drive with breath-taking ease and clarity speakers which have been considered "impossible" loads in the past.

INSTRUMENTS:

Fender Rhodes 88
Antique Steck upright piano