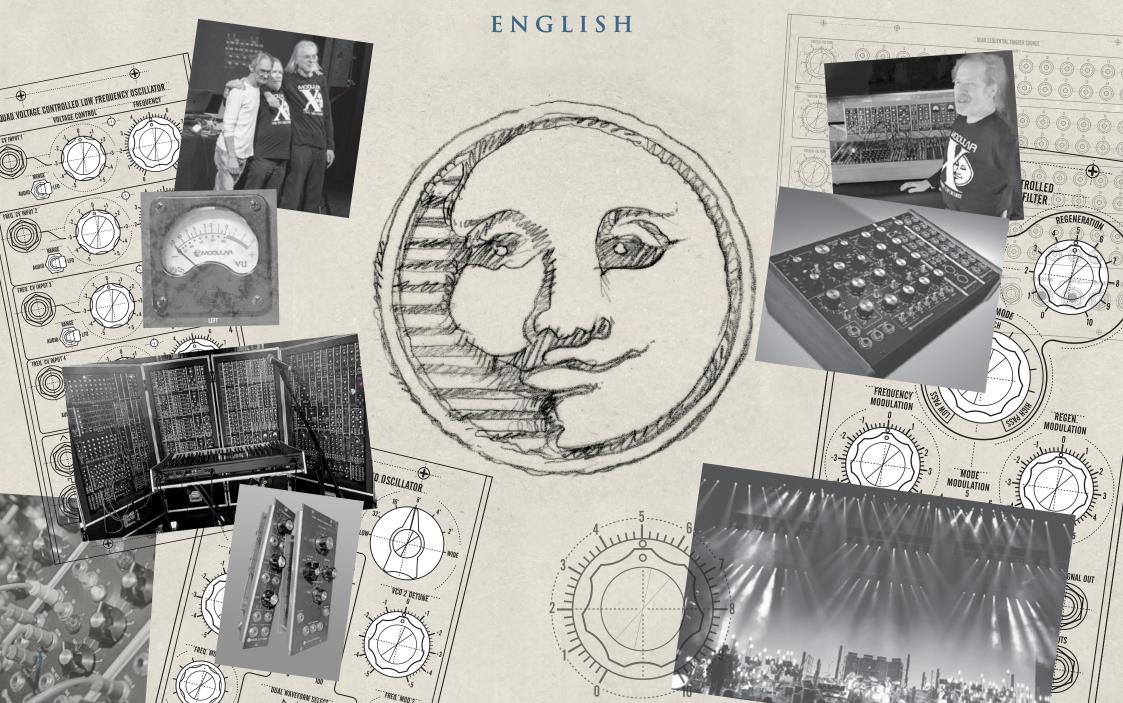
### HISTORY OF THE MOON



# 1979 Prologue The moonrise is still a long way off

The electronic band YOU was founded in Krefeld, Germany in early 1979 with the core lineup of Udo Hanten (synths), Albin Meskes (synths), and Uli Weber (guitar). The team also included drummer/synthesist Harald Grosskopf (Wallenstein, Klaus Schulze and Ashra), who had already recorded his solo album with Udo Hanten in the Krefeld studio and contributed drums and percussion to the first YOU album, recorded in the summer of 1979. The two albums –"Synthesist" and "Electric Day" – were released in 1980. A year later, an EP, "Scanner," followed with the same lineup.

In 1983, the YOU lineup was reduced to the

two synth players Hanten and Meskes. The albums "Time Code" (1983), "Wonders From The Genetic Factory" (1984), and "Laserscape" (1986) were released by this duo line-up. In 1988, the YOU duo reunited with Harald Grosskopf and, under the band name "Central Europe Performance," produced their only album "Breakfast in the Ruins," which was released in 1989. A concert tour followed in 1990 with an expanded lineup.

Two more LPs were released in 1996 ("[00:19:96:00]") and 2010 ("Benaki Cycles").



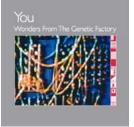
The entry into modular synthesis not only by YOU: The do-it-yorself "Formant" synthesizer in 1978.





















### 1996 YOU Live/Open Air







YOU live and open air in Lünen, Germany, June 1996 with laser and an inflated pyramid.

## 2006

Qatsimania in the Church – Central Europe Performance live





Hanten and Meskes live as the project "Central Europe Performance" on October 31, 2006 in the Friedenskirche Krefeld, percussion by Frank Mevissen.

Qatsimania in the Church – Central Europe Performance live

**2009**Synch Festival Athens, Greece



Hanten and Meskes, along with Frank Mevissen (percussion) and the "Qatsimania Project Choir" under the direction of Hans-Jörg Böckeler, performed live as "Central Europe Performance" at the "Qatsimania" event on October 31, 2006, at the Friedenskirche in Krefeld, Germany.

They performed film music by Philip Glass, and excerpts from the related movies by Godfrey Reggio's "Qatsi" trilogy were projected.



Udo Hanten und Gert Jalass working on the setup of the on-stage modulars.







#### 2000 Cort Jalage' Dro

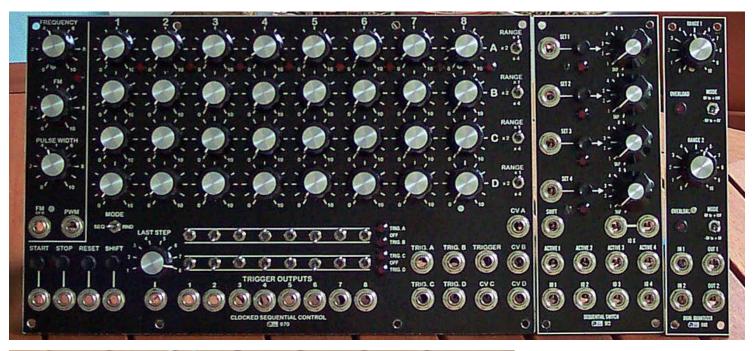
#### Gert Jalass' Pre-Moog/Moon Phase



Gert Jalass was already involved in building synthesizers long before Moog, Moon, and the like entered his life. Most notably, he built his own "Formant" synthesizer (see page 2), using instructions from the electronics hobbyist magazine "Elektor." By the late 1970s, this project had become quite popular among aspiring synthesizer musicians who could handle a soldering iron.

The pictures on the right show some of Jalass's early designs.





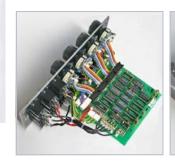


Three incarnations of the Sequential Switch module from 1980, 2000, and 2007. The latter was born in 2008 as Moon M564, the second Moon module.

Above, examples of Gert Jalass' "pre-Moog/ Moon" activities in the MOTM\* format – created in 1999/2000. From left:

- "Clocked Sequential Control" was a clone of the Arp 1630 sequencer.
- "Sequential Switch" was inspired by the PPG counterpart (a redesign of a circuit Gert had conceived in the early 1980s) and later revived as the Moon M 564.
- "Dual Quantizer" is conceptually based on the quantizer from Polyfusion.

\*Mother of The Modulars/Synthtech





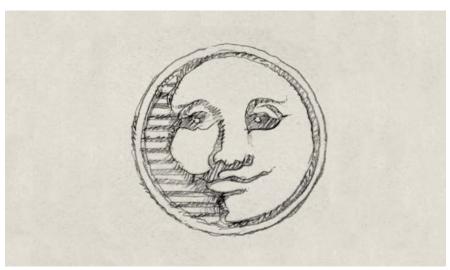
## 2002 The first Rising of the MOON

Around the year 2000, an engineer from Texas set out to revive the old Moog modular synthesizer concept – under the name "Synthesizers.com."

Udo and Albin – with several years of modular synthesizer experience and as fans of Tangerine Dream, Keith Emerson, Isao Tomita, and other modular artists – were excited by the idea: Finally, someone was doing this. However, after reviewing the range of modules, they found the system wasn't as "Moog-like" as expected. There was no ladder filter, no 960-compliant sequencer, and the design didn't really match the original in detail.

This led to the thought, "This could be done better." So the two began scouring the internet for information, circuit diagrams, and component sources, always keeping an eye on the original systems from the 1960s. And this as perfectly as possible. The goal was to recreate Moog modules in detail. Colleagues from the modular scene – Georg Mahr and Torsten Boost are two notable examples – also joined in to support the research project in its initial phase.

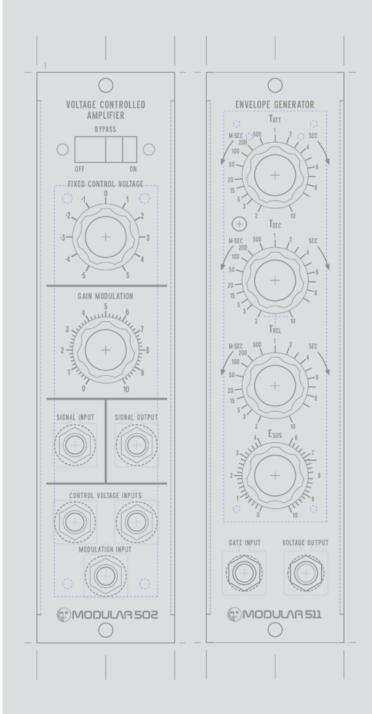
The modules' appearance in the early phase of the Moon project was intended to be as close as possible to the American model from the 1960s, as well as their sound.



First draft drawing for the "Moon" logo from early 2003.

The project was soon given a name: Moon Modular (that this name, in three letters, resembled that of a well-known synthesizer manufacturer was perhaps no coincidence).

The first version of the Moon website went online on May 10, 2003.



Just in case – the first real existing Moon products



In addition to developing synthesizer modules, it was also important to offer suitable – i.e., true-to-original – cases, specifically the well-known "P-Case." P stands for portable.

The latter were the first Moon Modular products to actually exist and reach the market. Interestingly, a certain Gert Jalass was one of the first (if not the first) customers for such cases.

Prototype of a Moon P-Case from mid-2003.



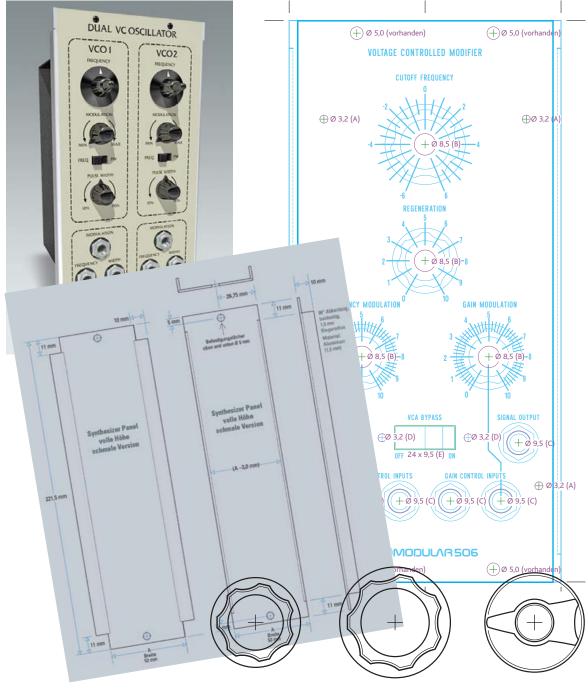
Pictures from the first version of the Moon website.



Research and technology – the period of ideas







# 2003 Initial Lunar Experiences – the Prototypes

The first problems arose in the spring of 2003. An initial reality check after the research phase revealed that the original plan to create modules "as original as possible" was significantly more difficult to implement than originally thought. So, the plan to recreate the originals 1:1 was shelved for the time being.

Interestingly, a few years later, Gerhard Mayrhofer in Munich perfectly implemented the "as Moogy as possible" concept under the name "Synth-Werk."

As a plan B, HAnten and Meskes moved away from the classic templates and retai-

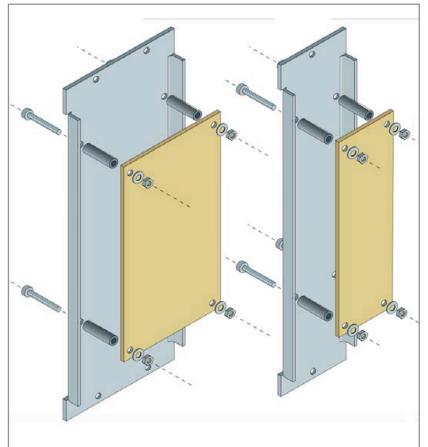
ned only their appearance. The internal workings of the modules continued to use analogue, but more modern circuitry.

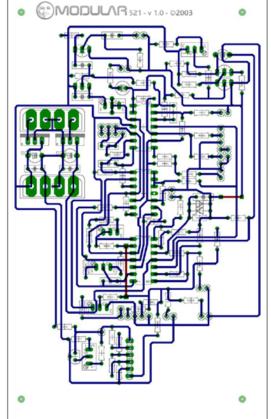
Matthias Schmidt (Curetronic) was brought on board for the new concept. He adapted his module electronics to the Moon concept and produced a number of prototypes from mid-2003 to 2004.

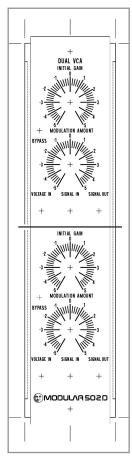
However, for logistical and technical reasons, a proper series production never materialized, so the Moon Modular project gradually petered out over the course of 2004 – at least for the time being...



Matthias Schmidt and Gert Jalass at the Superbooth 2016.

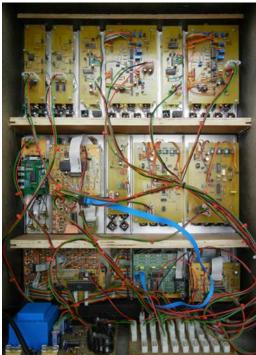






## 2003 Lunar Experience - more prototypes















This Moon Synthesizer prototype is now on display in the music department of the Burg Linn Historical Museum in Krefeld.

## 2003 Gert J. – first signs of life

The first email from Gert Jalass to Moon Modular (in English!) reached the founding duo in May 2003, shortly after the first version of the website went live. They knew each other "sort of" from the Moog nerd scene online, but had never met in person.

He asked about the availability of P-cases in the Moog format. These were the first truly available Moon products. Gert was thus one of the first, if not the first, Moon customer.

From synth@gjalass.com Wed May 21 11:35:00 2003

Return-Path: <synth@gjalass.com>

Hi all,

please let me know whether "YOU" are able to provide P-type cabinets in the near future. And, anything like construction lead times, prices, etc. would be interesting, of course.

All the best and looking forward to your reply

Gert Jalass

This was the Moon Duo's prompt reply to Gert:

Hello Gert,

It seems someone has seen through us (YOU) right away ;-)

The current status:

We are working on synthesizer modules that should be as close as possible to the Moog standard in terms of appearance, look & feel (and, of course, sound).

There will be matching cabinets for these, which will largely resemble the well-known P-Cabinet.

Both are currently still in the prototype stage.

We will keep you updated on the status – more information will be gradually added to our website www.moonmodular.com.

Best regards

Albin Meskes & Udo Hanten



Gert Jalass's Moog "Wall of Sound" as of late 2003.

The big Moog – number two in Germany.

### Only authentic with the Goofy nose...



The second Moog Modular System in Germany (the first was Eberhard Schoener's in 1968/69 – now on display at the Deutsches Museum in Munich) belonged to composer Florian Fricke, who was active under the band name "Popol Vuh." It was a Moog IIIp with sequencer completement.

After Fricke turned away from electronic sound generation, the synthesizer was acquired by Klaus Schulze in 1975, for whom the Moog became his primary instrument for years.

In 1994, Schulze began collaborating with musician Pete Namlook (aka Peter Kuhlmann), resulting in eleven albums under the project title "Dark Side of the Moog." In March 2005, the Moog was auctioned on eBay, and Gert Jalass won the auction.

On April 3, 2005, the synthesizer arrived at Gert Jalass's home in Switzerland, where he lived at the time. His comment:

Ref: Le trois P est arrivee!

Hey everyone,

the thing survived the transport well, and customs didn't want to look into it, as they were obviously more concerned with the rush of returning passengers (I crossed the border in Weil am Rhein, aka Basel, with this assumption). Incidentally, one could assume that the trunk of the Mercedes A-Class was designed in collaboration with Moog-4 P cabinets fit perfectly in there. A perfect fit! The 3P also looks very good for its age, however:

- In keeping with a saying the "68s" used to say ("Beneath the gowns is the mustiness of 1,000 years") the cases are covered in the dust of 36 years of German music history. In other words, the master craftsman will strike.
- A few of the lamps (in the CPs) don't work (which will be stressful, as replacing them is annoying).
- A number of potentiometers are also annoying (especially those on the sequencers – but more likely a problem of inactivity).
- Both power supplies are in terrible condition the



technician (from Studio Funk, Hamburg?) apparently didn't realize that only the transformer needed to be replaced. The power indicator light on the 3P is obviously burned out - they must have forgotten that it's designed for

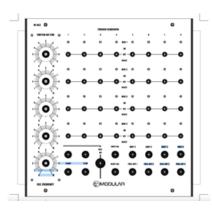
110 volts. Good thing I have plenty of Power Ones at home...

- And now for the surprises:
- The spare parts mentioned in the auction are (some of them) really great a "brand-new" replacement switch (green, white, red, blue) for each of the CPs. Plus various screws, semiconductors, and replacement bulbs.
- The rubber feet are missing (can you send me a bunch of "Moon-approved" ones, Udo?).

In a pretty good mood Gert



#### The mysterious Trigger-Sequencer





The first functioning trigger sequencer module, the "J-963," was launched in December 2006. Serial production was not planned at that time.

At the end of 2006, Gert Jalass built two self-developed 8-step/four-track trigger sequencers for his own (Moog) modular system, as a complement to his Moog 960 sequencers.

He also presented them to Hanten and Meskes – both owners of several 960 sequencers – and aroused considerable interest: could he build two more? He wasn't initially enthusiastic about the idea. He didn't have the time. And the idea of something like mass production seemed far-fetched.

But the two musicians didn't give up until Gert was persuaded. "Okay, I don't really have time for this, so don't stress about it. But hey, you'll get these things – it just takes time."

To be continued – about a year and a half later...



Finished front panel of the sequencer, S/N 2, January 2008.



First finished sequencer, S/N 2, March 2008

# 2008 The unplanned startup meeting

and ...

### ... the spontaneous step into the public

On April 13, 2008, Tangerine Dream played a concert in Eindhoven, Netherlands, under the motto "Tangerine Dream Plays Edgar Froese." The concert provided the nerds – all Tangerine Dream fans – with an opportunity to gather there. Meeting at Albin Meskes's (who lives an hour's drive from Eindhoven) were Udo Hanten, Albin Meskes, Gert Jalass, and Torsten Boos – who later became the core of the new Moon Modular team.

#### Surprise:

Gert Jalass brought the finished Moon M 563 trigger sequencers with him – one for Udo, one for Albin, and one for Torsten.

And so it began...

#### A few days later...

Since Albin Meskes' trigger sequencer was on site, but some small parts like the power cable were still missing, the module couldn't be put into operation immediately. Instead, the sequencer was properly photographed at the end of April 2008. And what do you do having a picture? That's right: Post it on the internet.

The moonmodular.com website was still there and online, but lacking content – empty, apart from the Moon logo. This had now been replaced by the new module photo. Without any further information except for the email address, which was already there. See image on the right.

Surprisingly, it took just under a day for the image to appear on various synthesizer forums online on April 28, 2008: in the "mysterious products" section. Thanks to email contact, all kinds of inquiries promptly landed in Hanten and Meskes' Moon inbox: "What is it?" - "What do you do with it?" - "How much does it cost?" - "Where can I order it?" - "Is it compatible with Dotcom?" Et cetera.

Gert Jalass initially knew nothing about all this. He had to be gently introduced to the subject.

The surprising reaction: "Well, so I'll just build a few more of those things." They were thinking about three to five...

April 28, 2008, was thus the actual birthday of Moon Modular.



Waiting for TD: from left Klaus "Cosmic" Hoffmann, Albin Meskes, Gert Jalass, Torsten Boost. Udo Hanten was the photographer.







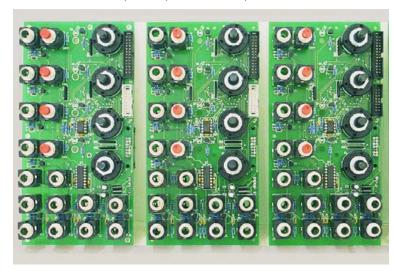


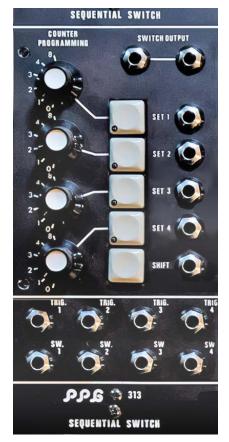
# 2008 Module #2-the M 564 Sequential Switch

All good things come in threes: M 565 Quad Quantizer Following the unexpected – but secretly hoped-for – interest in the M 563 trigger sequencer, Gert Jalass unveiled a second self-developed module, his "Sequential Divider Switch." Like the trigger sequencer, he had initially developed this module for his own use.

It was a quadruple analog switch module inspired by the PPG 313 – a clever analog switch in which each step can be active for 1, 2, 3, 4, or 8 clock periods before moving on to the next step.

The first Moon 564 prototypes were completed in August 2008:



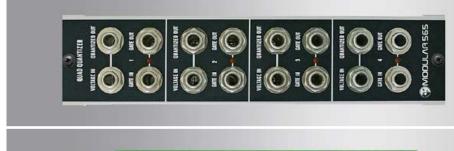




The third module, the first version of which saw the light of day in October 2008, was a completely new development. The M 565 was a quadruple quantizer that forced incoming control voltages in half-note steps (= 1/12 volt).

The team's target audience was users of Moog 960 sequencers (and their derivatives). These sequencers – unlike the ARP 1601/1621 sequencers, for example – could not be directly set to adhere to semitone steps.

The photo on the back shows that the Moon modules were equipped with two different plug connections for supplying the operating voltage (± 15 volts): for the synthesizers.com and Club of the Knobs systems.





# 2009 Moon on Stage live in Athens & the first Moon catalogue



Gert Jalass and Udo Hanten in the middle of Andreas Schneider's "Superbooth" stand at the Frankfurt Music Fair 2009.

The first Moon Modular catalog was published in spring 2009. It was a decent, 12-page, A5 format. It featured the complete modular program, consisting then of nine products.



In June 2009, the Moon team traveled to Athens, Greece for a live performance by the band YOU at the SYNCH Festival. Several new modules, including a prototype of the M 569 sequencer, made their stage debut.

A CD of the Athens concert, titled "Benaki Cycles – YOU live at Synch Festival · Athens," was released in 2010.



Gert Jalass checks the Moon Modular System in Athens.





Udo Hanten and Gert Jalass at the Soundcheck in Athens.



New year – new modules

#### 511c

The next Moon product was the M511 C – the C stands for "Control": an ADSR contour generator with voltage-controllable timing and sustain level.

The CV outputs are inverted and non-inverted.



### 525/526

Two additional level control modules were added: a quadruple reversible attenuator with bipolar controls, the M 525. As a counterpart, a three-channel mixer module with master control and mute switches, along with LEDs for the inputs. The outputs were inverted and non-inverted. The module was called the M 526.





#### **552**

Later that year, the M 552 followed, the first module with MIDI functionality in the form of a voltage-to-MIDI converter that could convert analog control voltages into MIDI data (note on/off, velocity, volume, pitch bending, and more) at its four inputs.

This was unprecedented in the 5U world.



Ed Buller makes a home visit and Moon gets a USA distributor In the summer of 2009, a British music producer named Ed Buller contacted Gert Jalass, asking if he could stop by in Berlin to "talk about modules." That Ed Buller, as it turned out, wasn't a nobody in the



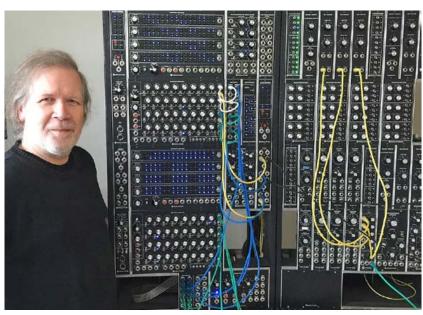
music and synthesizer scene. He had played keyboards in the band "Psychedelic Furs" in the 1980s and later enjoyed considerable success as a rock/pop music producer for the Island label (e.g., with Suede, Pulp, White Lies, t.A.T.u). Last but not least, Buller formed the "synthesizer supergroup" NODE with

fellow producers Flood and Dave Bessell, as well as Gary Stout (and later Mel Wesson).

Sure enough, he showed up at Moon's Berlin headquarters shortly afterwards and explained to Gert Jalass how he wanted to upgrade his large Moog modular synthesizer to optimize it and make it "live-ready."

Two things were important to him: First, he was looking for a way to pre-wire the modular system internally, eliminating the need for patch cords for the important connections (control voltages, gate, and audio signals). Instead, these would be controlled via special switching modules using toggle switches. No problem, said the Moon engineer. This concept was later implemented for other musicians' synthesizers, including Hans Zimmer, Mark W. Roberts, Brian Whittington, Vince L., and Torsten Boost.

Second: Ed was looking for a trigger sequencer that offered more extensive capabilities than the existing M 563 module (8 steps in four rows). The musician envisioned a device similar to the rare Simmons SDS6 sequencer from the early 1980s. Based on these suggestions, the M 568 "Quad Sequential Trigger Source" module was created, which was released in late 2010. The clock divider M 554 was also based on a suggestion from Ed.



Gert Jalass next to Ed Buller's finished modular system.



Ed Buller in his studio with the expanded Moog/Moon modular system.

On September 20, 2009, the American musical instrument distributor "Noisebug" in Pomona (near Los Angeles) contacted Moon Modular. This gave Moon Modular a distribution focus in the United States starting in late November 2009.



The advertisement said "The last sequencer you'll ever need"

At the beginning of 2009, the Moon team began thinking about a "real" sequencer, a module for the sequential generation of control voltages.

It was essentially to adopt the concept of the legendary Moog 960, but with additional "modern" features and stage suitability.

Initially, the module was to have the Moon-typical four control voltage rows (instead of the original's three), each with eight basic steps. The rows could be clocked separately, allowing four separate sequences of eight steps each, two sequences of 16 steps each, or one sequence with 32 steps (without the need for an additional module such as a sequential switch).

Each step can be individually switched to gate on/off, skip, reset, and stop.

Each row can be fed with separate clock and reset commands via trigger inputs. The module then features built-in quantization (switchable on/off separately for each row) and three voltage ranges: 1 volt, 2 volts, and 10 volts, of which 1 volt and 2 volt are quantized in semitone steps (1/12 volt).

The final module, including two expanders that allow individual steps to be directly accessed and queried from the outside, was released in spring 2010.





M569 sequencer with associated set and gate expanders to directly call up specific sequence positions.

#### 2010 SEM becomes MEM – or not But there's a new catalogue

At a time when Moon hadn't yet planned any audio modules (oscillators, filters), the Moon team had the idea of developing a synthesizer expander module. Not a clone of the Oberheim product of the same name, but a complete synthesizer voice with a similar range of functions. Unfortunately, this project was never completed.



MEM - "Moon Expander Module" as a 4-unit module (rendering).



MEM – "Moon Expander Module" in an 8-unit desktop case with "Expander-Expander" for 28 additional insert sockets (rendering).

The second Moon Modular catalog was published in early 2010. It was again in DIN A5 format and 16 pages long. It presented the updated modular program, now consisting of 17 products.



First appearance at the US music trade fair "NAMM Show" Moon Modular products were on display for the first time at the US music trade fair "NAMM Show" in Anaheim, California – at the booth of Moon distribution partner "Noisebug".





Synthesizer legend Don Buchla also appears at Gert Jalass's.



Gert Jalass with author Mark Vail.



Gert Jalass with producer and musician Brian Kehew.

Four new modules on the way ...

**551** 



Two additional MIDI modules have been added to the Moon range.

1. The M 551 MIDI-to-Voltage Converter, which generates various types of control voltages from MIDI data (keyboard CV, gate signals, velocity CV, pitch bender, modulation wheel, extra CC controller).

552



2. The M553 MIDI-to-Clock Converter, which generates clock pulses from MIDI data to synchronize analog sequencers. It provides a standard and a variable MIDI clock, as well as two gate pulses derived from on/off signals. MIDI start and stop commands are also put out.

554



The Octal Clock Divider M 554 combines eight divider circuits in one module.

Each of the dividers offers twelve division factors:

1-2-3-4-5-6-7-8-10-12-16-32.

The input jacks are normalized to allow complex divider combinations without external patching.

565 E



The M 565 Quad Quantizer is equipped with a controller, the M 565 E, that allows the output voltages to be limited to desired keys, chords, or intervals.

The keyboard-like toggle switches can be activated in any combination.

Third catalogue, second NAMM Show and one new module

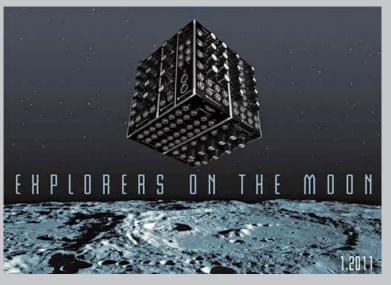


The Moon Modular booth at the NAMM Show 2011.



#### 511 AC

The M511AC is a quad gate delay module that forwards four incoming gate signals with a delay, whereby the delay time is manually or voltage controlled.



The third Moon Modular catalog was published in early 2011. This time, it was in landscape A5 format and again 16 pages long. It featured the updated modular program, now consisting of 24 products.



Meeting In Berlin (November 2011): Urs Heckmann, Hans Zimmer, Gert Jalass, Daniel Miller (from left).

Other new modules: Long trigger sequences and improved workflow







At the beginning of 2011, the newly developed "large" trigger sequencer M 568 was launched – the "Quad Sequential Trigger Source" with 4 x 32 steps that could be linked to create longer 2 x 64 or 1 x 128 step sequences. The four rows can be clocked separately. It's essentially the big brother of the first Moon module, the M 563.

Complementing this was the M 568A Assistant, which added additional control inputs to the sequencer, and the M 568P Programmer Module, which allows the storage of 2 x 12 trigger settings.







The M 592 Reversible Modulation Matrix combines six attenuators, each consisting of three elements:

- · 12-step input selector for selecting one of twelve signal inputs
- · Reversible attenuator that adjusts the input signal within a range of -200% to +200%; in the zero position, the signal is completely suppressed.
- · 12-step output selector for selecting one of twelve signal outputs.

The complete modulation matrix consists of three modules.

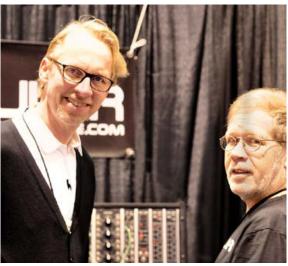
## **2012**New catalogue - new NAMM Show



The fourth Moon Modular catalogue was published in early 2012. Again in landscape A5 format and now 20 pages long, it featured the updated modular program, now consisting of 37 products.



Moon Modular had once again a booth at the 2012 US NAMM Show at the Anaheim Convention Center in Anaheim, California. The demo systems are getting bigger.



Herr Schneider – Mr. Superbooth – stops by.

# 2012 The controllable and storable quantizer



The Universal Programmer Module M 567 enables the user to save and recall settings from the 568 sequencer, 565D quantizer controller and future modules. The 567 can save 2 x 8 settings in its non volatile memory. Operation is simple.

Via the push buttons the user selects one of 8 memory slots. Two memory banks are selected via the bank buttons. Four push buttons control the memory operations.

With the lower "go to" buttons/jacks one can step through memory positions in either direction, even by trigger pulses from external sources (or from a 568 itself).

This way extremely long trigger sequences could be made possible.



The new Quantizer Controller M 525D allows to limit the output voltages generated by the M 565 v3 Quad Quantizer to any desired key, chord or note interval. Using the array of 12 keyboard-like arranged LED buttons, notes can be activated or deactivated in any combination.

Up to two M 565D Quantizer Controller modules can be connected to a single M 565 v3. If only one M 565D is connected, all 4 channels are forced to its settings.

If two M 565D are connected channels 1 and 2 are controlled by the first and channels 3 and 4 by the second. Multiple quantization settings can be stored if a M 567 Universal Programmer is connected to the M 565 v3.

#### Plus the first CP (Control Panel) modules in the original Moog format







Some modules have since been offered in Moog CP format.

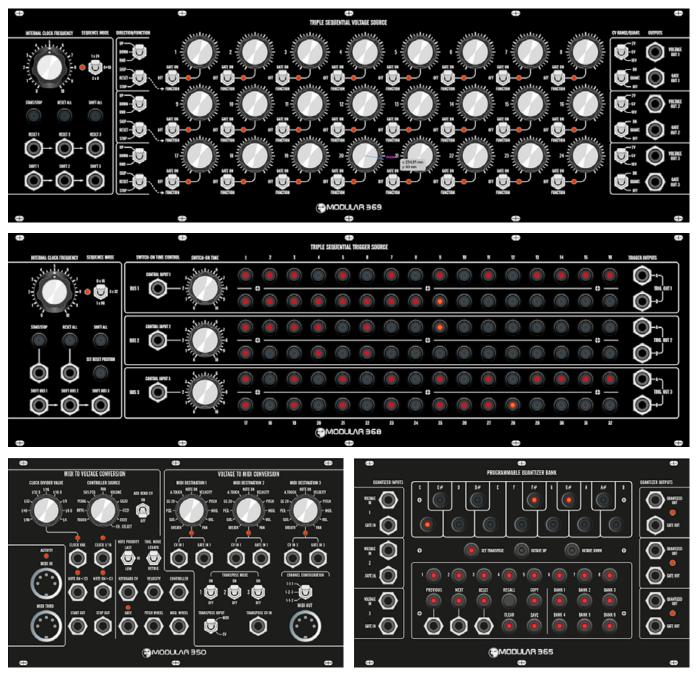
Shown here: The Reversible Attenuator/Mixer, which is only available as a CP module, the Sequential Divider Switch – identical to its portrait-format counterpart, as is the CP Quantizer.

#### 2012 Eurorack? No, maybe not.

In November 2012, the Moon team discussed offering some modules from the Moon Modular 5U portfolio in Eurorack format.

After careful consideration, however, it became clear that the logistical effort would not have been considerable, and the project was shelved.

As you can see, there were already some design approaches for existing Moon modules.



# 2013 The audio modules are coming: VCO-VCF-VCA



The fifth Moon Modular catalog was published for the 2013 NAMM Show.

Again in landscape format (A5) and now 24 pages long, it showcased the updated modular program, now consisting of 43 products.

The cover image signals that Moon is now also offering "audio modules" – in response to numerous customer requests: Namely, oscillator/filter/VCA.



NAMM Show 2013: Moon is presenting its first audio modules.



NAMM Show 2013: Gert Jalass with Synth legend Tom Oberheim.



NAMM Show 2013: Gert Jalass with Robert Rich.



NAMM Show 2013: Gert Jalass meeting the "Suit & Tie Guy".

Moon presents "real" synthesizers including VCO, VCF and VCA

#### 501 D



The M501D VCO module contains two voltage-controlled oscillators with the usual functions, as long as they fit on a two-unit front panel.

To utilize the VCO's additional capabilities, two additional modules are available...



... the VCO extension module M 501E. It simultaneously provides all waveforms of both VCOs, as well as two hard sync inputs and two CV inputs for linear frequency modulation...

#### 501E 501M



... the VCO mixer module M 501M. It mixes the additional outputs of the 501D to a switchable mono output or two separate output jacks.

### 506



The modifier module contains a voltage-controlled low-pass filter with switchable filter slope (12/18/24 dB per octave) and voltage-controlled resonance, as well as a VCA connected in series.

#### 2014 NAMM Show 2014 Hans Zimmer Live in London



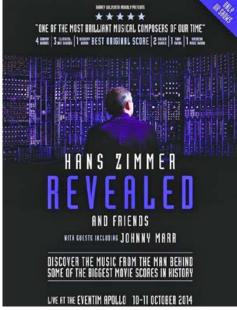
At the NAMM Show 2014, Moon Modular was represented for the first time with its own booth (as it is now a NAMM member).

The sixth Moon Modular catalog was published for the 2014 NAMM Show. It was again in landscape format and 24 pages long. It presented the updated modular program, now with 44 products.

Moon also now offers a more extensive range of cabinets.







On October 10, 2014, Hans Zimmer performed live for the first time with his full-scale instrumentation – including his modular synthesizer – for two nights at London's Apollo Theatre.

This was a first preview of the upcoming worldwide "Hans Zimmer Live" tours with Hans Zimmet featuring his film music live on stage.

More standard synthesizer functionality: Contour generators and LFOs

#### 511 D



The M511D module contains two identical contour generators for controlling attack, decay, release, and sustain level.

#### 524



The M 524 module contains four identical voltage-controlled LFOs for triangle and square waveforms with three frequency ranges each.

#### 524 A



The M 524 A assistance module extends the capabilities of the quad LFO module with additional waveforms and reset and sync functions.

## 2015 Now there are also cases



The seventh Moon Modular catalog was published for the 2015 NAMM Show. Once again in landscape format (A5), it again featured 24 pages. It showcased the updated modular program, featuring 48 products.

Moon Modular now offers a more extensive range of cases.







# 2015 NAMM Show 2015 and NODE Live in London

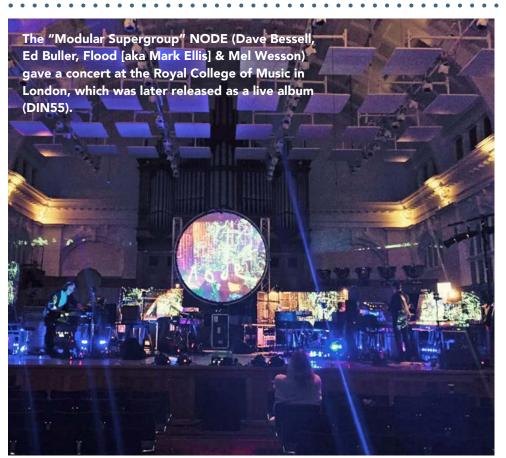




At the 2015 NAMM Show:

Gert with John L. Rice (left) and Nick Muso (right).

Also pictured is Gert Jalass with Moog veteran Herb Deutsch.





NODE at the soundcheck for their London concert. From left: Mel Wesson, Gert Jalass, Ed Buller.

#### 2016 NAMM and KnobCon 2016



NAMM Show 2016

In September 2016, the first Superbooth-like event, titled "KnobCon", took place in Chicago. Moon Modular was also represented there with a small booth.



KnobCon Synthesizer Meeting: The Moon Modular booth.



The eighth Moon Modular catalog was published for the 2016 NAMM Show. It came in the usual A5 landscape format, again with 24 pages. It featured the updated modular program, featuring 52 products.



NAMM 2016: Gert Jalass and Eurorackinventor Dieter Doepfer.



KnobCon Synthesizer Meeting: Gert Jalass (center) setting up the system.

## **2016**First Superbooth event in Berlin

From March 31 to April 2, 2016, Andreas Schneider hosted his own "Superbooth" synthesizer trade fair/event for the first time, at the "Funkhaus" on Nalepastraße in Berlin (the former GDR broadcasting center). Moon Modular is, of course, also be represented with a booth.



Superbooth 16: the Moon Modular booth.







Superbooth 16: Udo Hanten demonstrates the Moon Modular.

## 2016 Modules of the Year

#### 505



The M 505 is another filter module that had been added to the Moon portfolio. This module is designed as a multimode filter (low-pass, high-pass notch), with voltage-controllable filter mode selection and resonance. The filter slope is 12 dB/octave.

#### 502 D



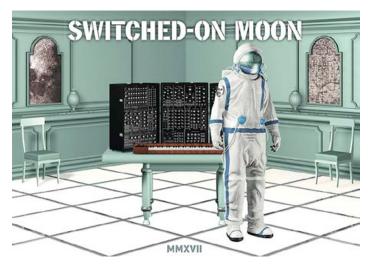
The Moon Audio range has been expanded with a Dual VCA module. The M 502 D contains two VCA units. Both are independently switchable between linear and exponential characteristics; the VCAs can process audio and DC voltage. There is also a ring modulator function that manipulates the inputs of both VCAs.

### 569 ESB/EGB



The M 569 ESB and EGB are two new add-on modules for the 569 Sequencer, allowing for easy access to specific set or gate positions.

# 2017 New filters for the people



The ninth Moon Modular catalog was published for Superbooth 17.

It was in landscape format A5 and features 24 pages.

The updated program featured 56 products.

**517** 



The M 517 module combines two voltage-controlled filter circuits in a 3U wide unit.

The two identical filters are switchable high-pass/low-pass filters with independent cutoff and resonance controls.

The filter slope is 24 dB/octave in low-pass mode and 18 dB/octave in high-pass mode.

The combiner allows the filters to be used as:

- two separate filters (stereo mode)
- two filters in series (maximum slope)
- notch/band-stop mode
- band-pass mode

The balance between filters 1 and 2, as well as the bandwidth, are voltage-controlled.

**517** S



The 517S Single-VCF is one half of the 517 module without the Combinator section, as a single high-pass/low-pass filter with voltage-controlled cutoff frequency and resonance.

NAMM Show Anaheim

Musik Messe Frankfurt





NAMM 2017: The Moon booth-crew (from left: John L. Rice, Gert Jalass, Mark W. Roberts).



NAMM 2017: Journalist/author Mark Vail with Gert Jalass and Mark W. Roberts.



NAMM 2017: Gert Jalass with mastersynthesist Michael Boddicker.



NAMM 2017: Gert Jalass with "Mr. Schmidt" Axel Fischer.

Gert Jalass holding a Modular Workshop at the **Frankfurt Music Fair** in April 2017..





The second Superbooth Berlin, now in the FEZ





Gert at the Moon Modular exhibition booth at Superbooth 2017, which took place for the first time at the FEZ Berlin ("Leisure and Recreation Center", formerly "Pionier-Palast").



The stage presentation was again done by Udo Hanten.



Gert with Bernd Enders and Hajo Liese.



Gert Jalass with Johannes Schmoelling (Ex-Tangerine Dream).

In Mai 2017 Gert Jalass participated at Moogfest in Durham, North Carolina, USA.



MOOGFEST MAY 18—21 DURHAM, NC

2017



After a long break from the stage, the band YOU is performing live again



Udo Hanten and Albin Meskes as the Band YOU, after a four year hiatus from the stage on December 15, 2017, live at the Rennbahn Building (Biebricher Saal), Krefeld.

A Moon Modular System was also present, of course.

The recording of this performance can be listened to/downloaded at https://robot-city.bandcamp.com/album/the-last-concerts



# 2018 Ten years Moon Modular



The tenth Moon Modular catalog was published for Superbooth18, marking the anniversary. It was in landscape format A5 and features 24 pages. The updated modular program, now featuring 60 products, was presented.









Gert Jalass with Synthesizer-Book publisher Kim Børn.



Gert with film composer Mark Isham and Michael Boddicker

First time at SynthPlex in Burbank

Third time at Superbooth Berlin

#### SYNTHPLEX



Synthplex 2018: Gert and film composer Tom Holkenberg (JunkieXL). Synthplex 2018: Ed Buller, John L. Rice, Mark W. Roberts.



#### SUPERBOOTH18







Superbooth18:

The Ten-Year-Moon-Modular Anniversary **Synthesizer One-off instrument** 

YOU featuring Gert Jalass live on the Superbooth18 stage

Gert Jalass solo live at the Mindscape Festival



Superbooth18: YOU live (Udo Hanten und Albin Meskes) featuring Gert Jalass. (https://robot-city.bandcamp.com/album/the-last-concerts)





Superbooth 18: Gert with E-Mu founder Dave Rossum.



Superbooth 18: Gert with Florian Schneider (Kraftwerk).





Gert Jalass live at the Weltklang/Mindscape Festival (Zeil am Main, November 5th 2018)

# 2018 And the Moon Portfolio is still growing...



The additional M 543 E modules provide effect send paths with voltage-controllable send and return levels.

Available as standard 5U and CP modules.

The M 543 output mixer module is a four-channel mixer with voltage-controlled volume and pan per channel, master volume, headphone output, and an A-440 tuning oscillator. Mute switches for all controls and analog VU level meters are also included. The later V2 version also featured balanced outputs.



The reduced output mixer module in CP format represents a basically identical four-channel mixer with voltage-controlled volume and panorama per channel, etc.





The M 504 filter module features a traditional low-pass ladder filter with switchable slope (12/18/24 dB per octave) and voltage-controlled resonance.

The Midi-to-Voltage Converter M 551 CP uses two separate converters to generate control voltages of various types (keyboard CV, gate signals, velocity CV, pitch bender, modulation wheel, extra CC controller) from Midi data plus clock signals at an extra output.

# 2019 Jalass in California and – Munich



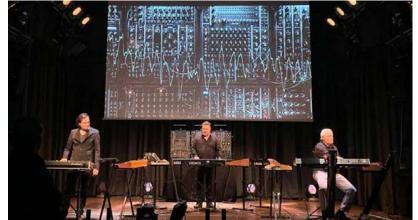
The eleventh Moon Modular catalogue was published for Superbooth19, in a square format of 21 x 21 cm, with 24 pages and a product range of over 65 products.



January 2019: Gert Jalass with flutist/synthesist Pedro Eustache and Hans Zimmer in the Remote Control Studio in Santa Monica.



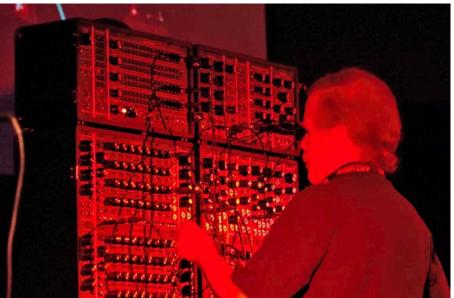
January 2019. Gert Jalass visits the studio of and with Martin Gore (Depeche Mode).

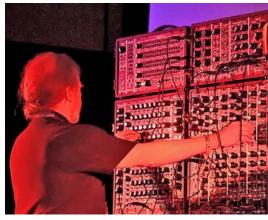


Munich: Video shoot for "SAW" (Johannes Schmoelling, Kurt Ader, Rob Waters) and – Moon Modular.

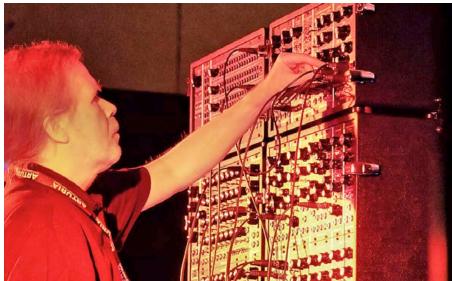
#### 2019 Synthplex 2019 Burbank













SynthPlex2019: Gert Jalass gives a concert on his Moon Modular System.

# Superbooth19 - Tribute to Udo Hanten



# 2019 The 19th module-year: Sample & Hold and the big filter bank



n addition to the S&H circuit, the M 528 Sample & Hold module features: a VC clock oscillator, also an LFO with triangle and square waveforms, external gate input, Signal input (internal white noise and random voltage) or external signal. Control voltage outputs with variable portamento.





The 508 B VC Band Pass Filter is based on the state variable topology with 6dB/octave. Voltage control on cutoff (center) frequency, regeneration (Q/width of the frequency band) and gain (from cut to boost).

The 508 Filter Bank consists of:

- · a 508 io Bandpass Bank
- · a 508L VC low-pass filter
- $\cdot$  four 508B VC bandpass filters
- · a 508H VC high-pass filter Each filter can be voltage-control-

led separately and has a gain of 6 dB/octave. The 508 IO module allows simultaneous control of all filters.

The M 567 Programmer module allows saving the settings.

December 2019: In the German music magazine "Keys" an elaborate article about Moon Modular, written by Bernd Kistenmacher, was published.



# 2020 The Corona year Nevertheless, work is underway: on Hans Zimmer's

live system



This was supposed to be the twelfth Moon Modular catalogue, but it never appeared, just as the 2020 Superbooth never took place.

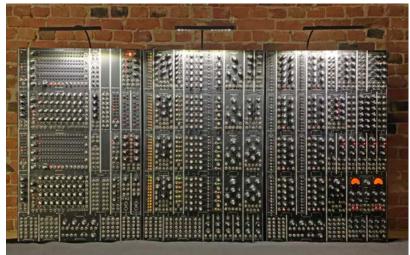
The pandemic brought the global event catalog to a standstill.



April 2019: Hans Zimmer's "Giorgio II" modular system in its original condition – back in Berlin to be brought up to date technically and mechanically.



Packaged, it looks something like this...



Summer 2020: "Giorgio II" gets a new look. Featuring more modular surface and a completely new aluminum cabinet. The system later accompanied Hans on his worldwide concert tours.



... and at the band rehearsal (in Munich) this way:

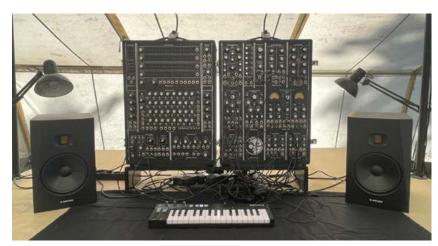
in a tent

Superbooth21 – first post-pandemic edition.
In the fall and



For Superbooth 2021, which took place in the fall after the pandemic had been more or less overcome, the twelfth Moon Modular catalog was published. This time in a larger A4 format with 20 pages. It now offers 67 Moon Modular products.

Moon Modular presented itself in a tent. It was more like a cross between a school reunion and a Boy Scout camp than usual.



Superbooth21: The presentation synthesizer in camping mode.



Superbooth21: Gert Jalass interviewed by Ed from SonicState.



Superbooth21: Gert Jalass with Albin Meskes, the "graphic hand" at Moon from the very beginning.



Superbooth21: Gert Jalass with Hartmut Heinze (Mastermind of Projekt Elektronik).



Superbooth 21: Tent neighbors Gerhard Mayrhofer and Markus Gabriel (Synth-Werk).

#### 2021 And there were new modules, too

#### **502 S**



The M 502 S Simple VCA is a dual VCA module that features two signal inputs and outputs each, two modulation inputs, continuous linear/exponential controller plus switchable AC/DC mode.

530



The M 530 Voltage Controlled Digital Delay is a hi-fi stereo delay (3–3000 ms). Tape, digital and ping-pong modes of delay, hold with overdub and delicate delay time and feedback control in combination with CV and trigger control over various parameters make this module not only a modular FX unit but also an instrument on its own.

531



The M531 BBD Analog Delay includes two separate bucket brigade delay lines. A short one with 1024 stages and a long one featuring 4096 stages. Both delays work simultaneously and one can fade between them to create multi-tap delay effects.

Most parameters are voltage controlled, allowing integration in a complex modular setup.

**532** 



The M 532 is an analog phase shifter module based on a classic phaser design with up to eight phasing stages. Built in voltage controlled LFO (triangle and rising sawtooth waveforms). Voltage control over phase shift, feedback and dry/wet mix.

#### 2022 Superbooth22, once again in Tent City

**Superbooth22** took place again on its usual date in May. The 5U Synthesizers once again found themselves in a camping setting on the FEZ outdoor grounds.



Superbooth22: Cheers at the end of the second Superbooth in the tent environment.

From left: Markus
Gabriel (Synth–Werk
Master Synthesist),
Gerhard Mayrhofer
(Head of Synth–Werk),
Bernd Kistenmacher
(author and musician),
Mark W. Roberts
(modular enthusiast
from Arizona),
Gert Jalass (Moon
Master).
Pic by Albin Meskes.



Gert Jalass with Girts Ozolins (Head of Erica Synth)



Gert Jalass with the sound designers Kurt Ader and Kevin Schroeder.



Gert Jalass with Till Kopper.



Superbooth22: The Magnificent Three from the synth booth. From left: Albin Meskes, Gert Jalass, Mark W. Roberts.



Superbooth22: Gert Jalass being interviewed by Katrin Kaspar (Amazona).

The last Superbooth with Gert Jalass and [for now] Moon Modular



The exhibition system at Superbooth23 with the new additions to the M 569 V2 sequencer as prototype modules.



Gert Jalass with composer and synthesizer designer Cornel Hecht (left) and film composer Paul Haslinger, (ex-Tangerine Dream, middle).



Gert Jalass with Michelle Moog-Koussa, daughter of Robert Moog and chairwoman of the Bob Moog Foundation, at Superbooth23.



Albin Meskes and Gert Jalass with Hans Zimmer at the dress rehearsal for his 2023 European tour in Oberhausen, Germany.

# 2024 Year of Disaster and EPILOGUE

Superbooth24 began on May 16, 2024 – as always, "the" European synthesizer event of the year. The new products to be presented there were finished and ready to be shown at the booth; poster displays and flyers had been printed.

Gert Jalass had taken a week off before Superbooth – as usual, on the coast in Denmark.

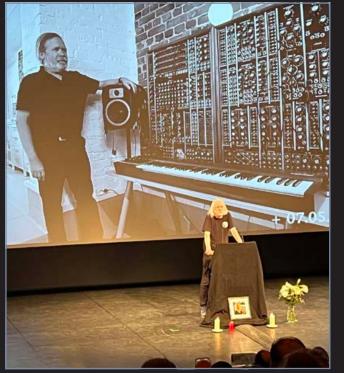
On the day the fair was set up – one day before it started – Gert surprisingly didn't show up and couldn't be reached by phone. The team began to worry seriously...

On the first day of the fair, terrible news from Denmark made the rounds in the morning: Gert Jalass had been found dead on the beach at his vacation spot on May 10, 2024. That evening, Superbooth organizer Andreas Schneider arranged an impromptu memorial service, where Gert's friends and partners were able to speak.

On September 17, 2024, Gert was laid to rest in Berlin in the presence of many friends and companions.







As a result, the situation initially appeared more than pessimistic for the team and circle of friends of Gert Jalass/

Would a future for the project without mastermind Gert Jalass be conceivable or even possible?

Many months passed before the situation surrounding Gert's technical legacy could be resolved and Gerhard Mayrhofer (Synth-Werk) decided to continue the Moon Modular project.

There is a future on the moon...

Text & Design by Albin Meskes

Photos by
Neil Fellowes
Udo Hanten
Gert Jalass
Carolina Janßen
Henning Janssen
Bernd Kistenmacher
Till Kopper
Angela Kroell
Bernd Malkowski
Andreas Merz
Albin Meskes
Alejandro Moros
NASA
Christine Otto
E. Patsialos
John L. Rice
Mark W. Roberts
Ulf Thürmann

All trademarks appearing are property of their respective companies.

