**I. Ruin & Wesen**

**So the first completed MiniCommands have been constructed and shipped out – how are you feeling?**

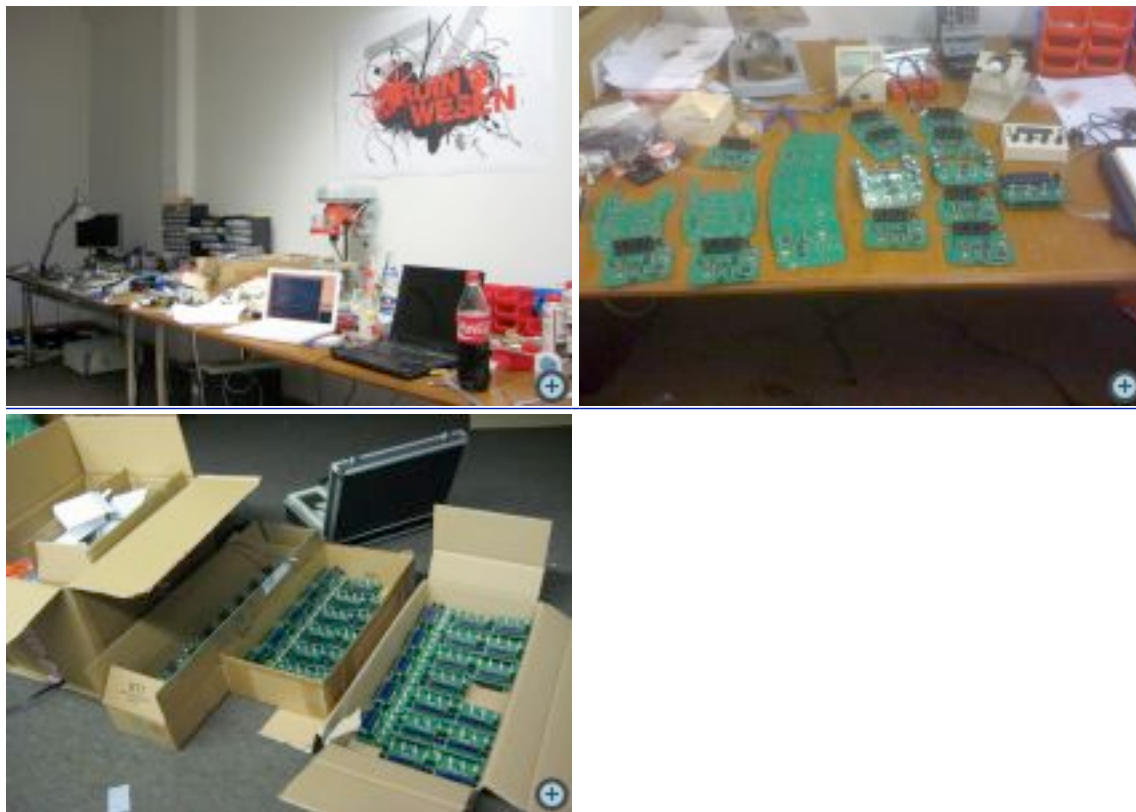
Immensely happy and released, it's been a really really long and rough ride from the first idea last year to start selling the devices to people. The product itself has changed tremendously as well, and I'm finally quite happy with the way it all turned out. Now I have to plan for the shipment party :)

**Can you tell us about how Ruin & Wesen (R&W) started?**

It all started about a year ago, in 2008. I had been dabbling in electronics for a few years, but kind of remotely and not being serious about it. I was mostly a programmer until then, and had built a first MIDI controller that wasn't actually really useful. I had decided a few months before to do a full liveset with the just the MachineDrum, and for a gig in Athens I decided to build a small device to control the delay. I think that was very shortly before the CTR-FX machines came out, which is a good thing, because after that I think I never would have built the very first MiniCommand. Anyway, I built this horrible looking blue box with 4 potentiometers and a microcontroller, and it completely changed the way I played pretty much immediately. I think that's when I started talking about it on the forum as well, and people asked me to build some

and sell it to them.

I was also hanging out digitally with Phil (Ruin), who was building modular synthesizers and selling them through the internet, and decided to get a bit serious about electronics and learn some of the analogue stuff as well. And the more I did that the more the idea started to grow to start a kind of small home business of building synthesizers and controllers, so I asked Phil to do a joint thing and that's where Ruin & Wesen comes from. It's been quite hard to bootstrap the company with Phil living in Canada and me living in Germany, and for the moment we had to focus on getting financially viable with the MIDI controllers, and I've been kind of leading the ship, but we hope to change that very soon, and actually get some nasty industrial analog Ruin monstrosities out in 2009.



[a. MiniCommand development]

**At what point did you decide to develop and sell the MiniCommand as a commercial product? What was the motivation for investing in and improving the early prototypes of the MinCommand? Did you see a gap that manufacturers were not targeting and decide to move in? Or did commercial development of the MiniCommand step from people harassing you about the product? Was the motivation purely commercial?**

The early prototypes really were that, early prototypes, and looking back at them, I kind of

cringe. I definitely learnt a lot in this last year, especially when it comes down to electronics, mechanics, and building solid products. The motivation was a mixture of wanting to do it for the money, not to be rich, but to be able to make a living doing something I like, and probably the more important reason of just wanting to build cool stuff and share with everybody. Actually we started this whole thing with no clue about building a business at all, but thanks to a lot of help from my family and from my friends, a few of whom were crazy enough to actually give me some money for prototypes, we were able to take the MiniCommand through a few cycles of development and finally come up with the final device.

**From the start, you've been very open with the MiniCommand development process and embraced the idea of the MiniCommand being open-source. You could have easily developed the MiniCommand and kept your ideas and findings to yourself (especially with respect to implementing MIDI on the Arduino platform). What made you want to share that knowledge?**

At first I was thinking about keeping most of the things closed source, and allowing people who really wanted and knew what they were doing to program the device. But I started to realize that nobody would really benefit from such a thing, the market for an Elektron controller is niche enough that I wouldn't have to hide any spectacular things I worked out. The real dealchanger though came when I modified this Arduino software to be able to program my devices (both MonoJoystick and Minicommand). By the way, the MiniCommand has nothing to do with Arduino itself, except that I modified the editor to upload over MIDI. All the code that is running on the MiniCommand is completely separate from Arduino (it's super optimized for MIDI and the MiniCommand hardware, and the actual processor in the MiniCommand is much bigger, and has things like external RAM and SD-Card added).

Suddenly I was able to bang out crazy controller ideas in a few minutes instead of a few hours, and I spent the weekend (I think it was shortly before Christmas 2008) building things like algorithmic sequencers, an arpeggiator, etc... That's when I decided to make everything opensource, even the schematics, and to actively encourage people to build firmwares for it. I think the main reason for this is (don't laugh), I have a very bad memory, so I always forget about programs and firmwares I write and devices I build, so I'm much too lazy to actually remember what I would have to keep "secret", and what I would like to give out. So now I can just put everything online and not worry about it. And if it can help people do cool things with it, that's even better.

**Are you concerned that an open source platform will reduce or cut into your sales?**

No, I think there's a bunch of different possibilities here: someone builds their own version of the MiniCommand using my schematics, maybe modifying it in the process (a bit like the monome

clone). That's super cool, I don't think I'll be able to help much because I don't have the time, but definitely go for it. But that's quite a hard undertaking, cause it's not a simple device, and it will probably end costing you more than getting a finished one, so I think the DIY thing is for tinkerers and hackers, and I'm all for that and the fun of building. I'm thinking of actually doing a smaller kit version so that people can use the software environment and add additional sensors (just like the Arduino, but with MIDI and maybe some standard things like pots and buttons added). Then there is the possibility that a company clones the device. Honestly I don't see that happening, and if it happens, I'll call them names on my blog, and quickly build a new product and they will have trouble keeping up :)

**How easy will it be for users to design their own firmwares for the MiniCommand? Did you intend for this aspect of the MiniCommand to become a selling point? Was it a core component to development of the MiniCommand?**

It definitely was a core component. At the moment, the approach we're taking is that you actually have to be into tinkering, programming and DIY a bit to build firmwares on the MiniCommand. It's not an easy thing like you can get it in a few hours. It's real programming and it's not always a breeze. But on the other hand, you don't have to program your own firmwares. I wrote a few that I think are pretty cool:

a standard MIDI Controller firmware, with MIDI learn, Ccs, different pages, etc... But you can also control the MachineDrum effects, it shows you the name of the MD parameters when you MIDI learn, you can record knob movements, etc...

a firmware to play the MachineDrum like a synthesizer, even polyphonically

an arpeggiator for the MachineDrum

algorithmic sequencers that are a lot of fun

an automatic track slicer to cut-up and reverse recorded loops on the MD.

Actually that's just the beginning, and I know already that quite a few people who are getting the MiniCommand know how to program and will write and adapt firmwares. So that's why we have a tool called the PatchDownloader (you can see that I'm really good at choosing names) that's a bit like the iTunes store, but free and for MiniCommand firmwares. You start the program, and it shows you the recently uploaded firmwares, and You can download them directly onto the MiniCommand to try them out. You can also search by using keywords. So it's really super easy if you're not into programming to just settle on a firmware that you really like (I basically just use a simple very restrained firmware where I play live), or try out every new one coming out.

**What's next for R&W? You've mentioned the MidiCommand – the MiniCommand's older and more full-featured brother. Is that still in development? You've also mentioned the**

## **MonoJoystick – can you tell us about that?**

The MidiCommand is definitely on hold for now. I can't find a decent casing for what I had in mind, and if I'm going to make a big device like I wanted, then I'll really move to a bigger processor and do something that takes the whole concept to a new level. I have some ideas and prototypes already, but shhhh.... that's secret.

What's next is definitely the MonoJoystick, which is like a MiniCommand, but with a joystick and 6 buttons instead of encoders. It's really going to be the same device, and I'm going to adapt firmwares so they run on both. I think they are going to be ready very soon, as I'm putting finishing touches on the mechanics.

## **[b. business lessons]**

### **Though R&W is still very young, what lessons have you learned so far?**

So many lessons I can't really remember them. To be honest, had I known what I was up for last year, I'm not sure I would have started. Now that I've gone through all that stuff, I would never go back, but it definitely was a long and rocky road. I think the most important lesson is to follow your dream. That sounds so cheesy I can hear Ruin passing his dinner on the other side of the pond, so I'll spend a few lines to explain what I mean.

What I mean is that once you have figured out what you want to do, put in the energy and dedication necessary to make it happen. And if bad things happen, try to convince yourself that all is for the best and just carry on (self delusion is a very important driving force in my life). Also, don't try to plan things out too precisely, because that probably just is going to scare you and delay things. That still sounds like new agey mumbo jumbo, so I'm going to give a few examples.





I know I'm a bit hardcore when it comes to dedication, but I think that was an important reason for why things seem to have turned out alright. I basically completely rebooted my life when I started the company: I spent a few months at the beginning reading every electronics book I could, going to all the lectures I could find at university, so that I would get better at electronics (I'm still pretty bad, to be honest. At least I know how a transistor works now. Well, kind of...). Then I started to fill up my electronics lab with components and I basically spent summer of 2008 in the heat of my attic soldering every circuit I could find. That's also when I built the first minicommands and shipped the first circuits. I really physically cringe when I look at what I sent out now, cause they were so brittle and ugly and badly done. But then that's how I learnt to build better devices. After that came the moment where I got the CNC mill, and spent 4 weeks completely immersing myself in CNC programming, and wrote my own CAD/CAM software to mill the casings and do prototypes and other tools I'd need. You can check it out online as well at HYPERLINK "<http://cl-mill.googlecode.com/>"<http://cl-mill.googlecode.com/> , but that's really the "it has to work by tomorrow afternoon" programming style.

Also one thing this whole experience taught me was to get really organized, and I've actually started to have a clean house :)

**Has your experience with the MiniCommand given you a new perspective on other open source projects like the Monome, the XoX Box or the Midi Box?**

I think working on this the whole time has made me a bit immune to the whole music gear scene, and I'm not following it very actively at all anymore. It seems like I found my dream team (the Elektrons + MiniCommand), so I can't really answer that question, sadly.

**Do you think that large manufacturers could adopt an open source platform for a product and still have that product be successful?**

I'm not really sure about that, maybe also because we've never seen it done in the music market. I don't see why it would hinder success in any way. I can also see why a company would decide against going opensource, especially for products where the copy factor is much higher.

**What niche do you see the MiniCommand filling in the current e-music market?**

I think there is no MIDI device that's as versatile and simple to program as the MiniCommand (without wanting to sound too arrogant). I can't explain the exhilarating childish fun you can have with programming your own ideas and have them run on the hardware directly, after just a few minutes. It's completely different than building a thing in Max, for example.

Also, especially with the addition of the SD-Card (which I haven't got round to use very much yet), I think the MiniCommand is an amazing MIDI swiss knife. We used it 10 days ago with Deer in Weimar to adjust our livesets on the MachineDrum, adjusting levels and tweaking kits. I plan to add this firmware which will work like TimeMachine (the macosx backup program), but for sysex backups. You connect the minicommand, it backs everything up automatically every few seconds, and then you can turn an encoder to go back and forth in time and listen to every step of your pattern editing. The possibilities are really just endless.



## II. Wesen

**Tell us about your musical development. Do you play any instruments? If so, how did you get into electronic music? If you played a traditional instrument, do you draw on those skills when producing or playing out?**

I played a bit of piano as a kid, and the electric guitar as a teen, but then completely stopped when I went to university and got into programming. Then some things happened which shook up my life, and music was the main thing that got me back on track. I started producing electronic music about 4 years ago, and picked up the guitar again shortly after that. I then switched to bass, and got into it 100% wesen-style, practicing for 8 hours a day for a year. Although I'm not able to practice very much lately, I'm still playing in a jazz big band and enjoying it very much. However I can't say that the electronic music and the "traditional" music influence each other very much. I guess some of the funky stuff in my techno can be attributed to me practicing a lot of Motown bass lines, but I like to keep the two pretty separated. I don't think real instruments over techno sound very good either :)

**Name one thing you wish was different about your Elektron gear – what change is**



### highest on your wishlist?

Hard question, I think they're basically pretty much near perfect as they can be. I think the overall sound of the Elektron machines is not very good: the reverb on the MD has a tendency to get on my nerves, i'm still rolling my eyes at SRR after filter, and I've never figured out what the DIST knob is for. The machines have a tendency to make nasty clicks as well. But while it sounds like I'm ranting, the user interface so totally makes up for the sound quality that I really don't need any other piece of gear or software.



**It's clear that the MiniCommand was, and is, integral to your music-making. How important do you think equipment is, whether software or hardware, to making music?**

I think it's profoundly important, and shapes everything you do and hear. The MachineDrum is the only piece of gear I ever had. I bought a MonoMachine later on, but haven't really cracked it open yet (that's when things started rolling really fast with R&W). I can't say if I was just lucky to get a perfect piece of gear on the first try, or if the MachineDrum is just that good, but I think that having one piece of gear, and really focusing on using it and knowing it is more important than going on a wild goose chase for the "perfect" machine. At first I was pretty annoyed by the

MachineDrum, because it sounded bad, and it wasn't fun to use and it was really really expensive. But then when I started getting into it, and spending more and more time with it, I came to love it. I think here again the dedication and the time you spend to know something inside out in the end is more important than the thing itself.

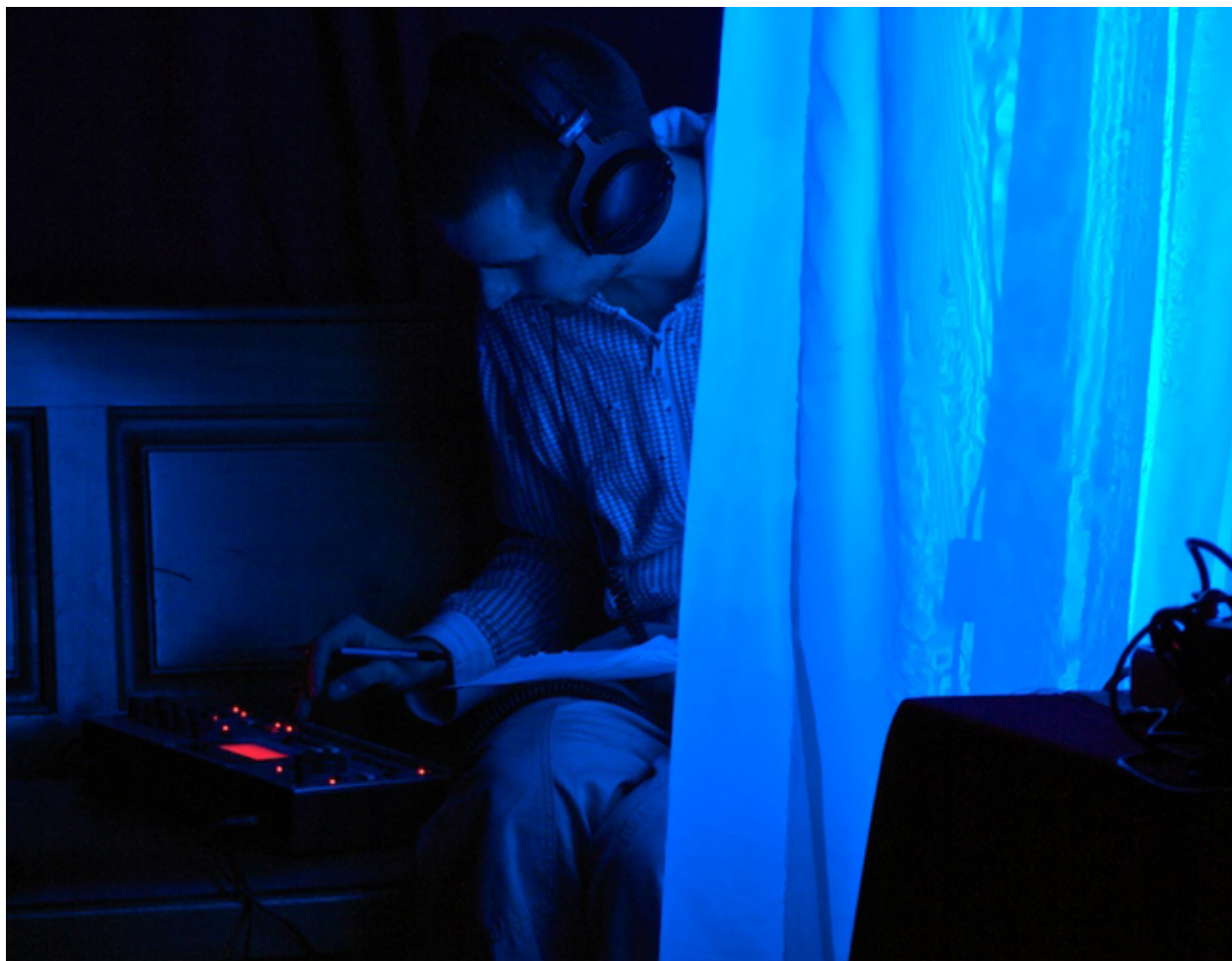
**You're as open with your music-making process as you are with the MiniCommand – what motivates your being open with respect to your music?**

I think it's because I like to show off :) I'm very shy in real life, but when it comes to showing stuff that I made and that I'm proud of, I know no limits.

**You've posted on several occasions explanations of how you've developed certain sounds and built sets from patters. You've also discussed how you've "mapped" or analyzed in detail certain minimal techno albums, such as Richie Hawtin's DE9 series – what caused you to develop such an analytical perspective of techno? Do you feel that deconstructing those albums, and your own music, has improved your musicianship? How has it influenced your technique?**

Yes definitely. I think that comes from spending so much time with all these kids studying jazz. The way you learn in jazz is that you copy all the greats, you learn their solos inside out, you analyze them until you incorporate them in your language, and from there you shape your own voice and own language. By copying and analyzing, you learn all the tricks and gimmicks and ideas of other people, but I don't think you can ever lose your soul, you just expand it. I've listened to DE9 – Closer to the Edit over 200 times, and still it inspires me as much as on the first day, for example.

It's interesting how much ear training is similar in studying jazz and techno. When I played a lot of jazz, I started noticing how I could more and more sing in tune, and identify melodies and pitches in my head when hearing them. The same thing has happened in techno with frequency ranges, Eqing, etc... I can now get a better sounding track on the MachineDrum with its not-so-good-sounding Eqs than I would have been able to a few months ago with whatever expensive software there is on the PC. It's all about the practice and the ears, I think, and that's just completely the same than in jazz.



Also what I do a lot is get really analytical with livesets by other people and my own livesets, writing down breakdown structures and practicing them. So I have these pile of notes that read like “Richie Hawtin breakdown trick #11: ride highpass for a really long time, send one track into the delay and play with delay time, shorten delay time and go into feedback, then kick new track in without low frequencies, and add bass after 4 bars”. Then I take these papers, and I basically practice what's written on them. I know it's a completely autistic approach to the whole DJ/ techno thing, but it's working for me :)

**Most of our readers probably know of your live sets, but in addition to crafting live sets, you also write songs. Are you planning on releasing any of those? Will there be a Wesen album sometime in the future?**

Actually I don't really write songs, it's a process that still feels completely alien to me. I put in a lot of effort last year to actually finish a few tracks, and they are coming out on May 18. as an EP called “Zwiebel” on rednetic recordings (<http://rednetic.net/>"<http://rednetic.net/>) . I hope I can find the time this year to get into sequencing and arranging, it's something that still scares me

quite a bit.

**Like a lot of electronic musicians, you seem to have taken on several roles – musician, programmer, manufacturer, and teacher. Which role do you like the most? Which role do you like the least? What other contributions do you see yourself making in the future?**

I like them all, and being able to switch from one to the next is really enjoyable. I can program my brains out, and then switch to the more emotional musical role, and when I need to relax, I switch my brain off and my soldering iron on and just do some sweet repetitive manual labor.

“Zwiebel” by Wesen on Rednetic Recordings: <http://rednetic.net/http://rednetic.net/>  
Recent liveset recorded in Weimar, 18.4.2009, MD + MnM+ Minicommand: [Recent Liveset](#)