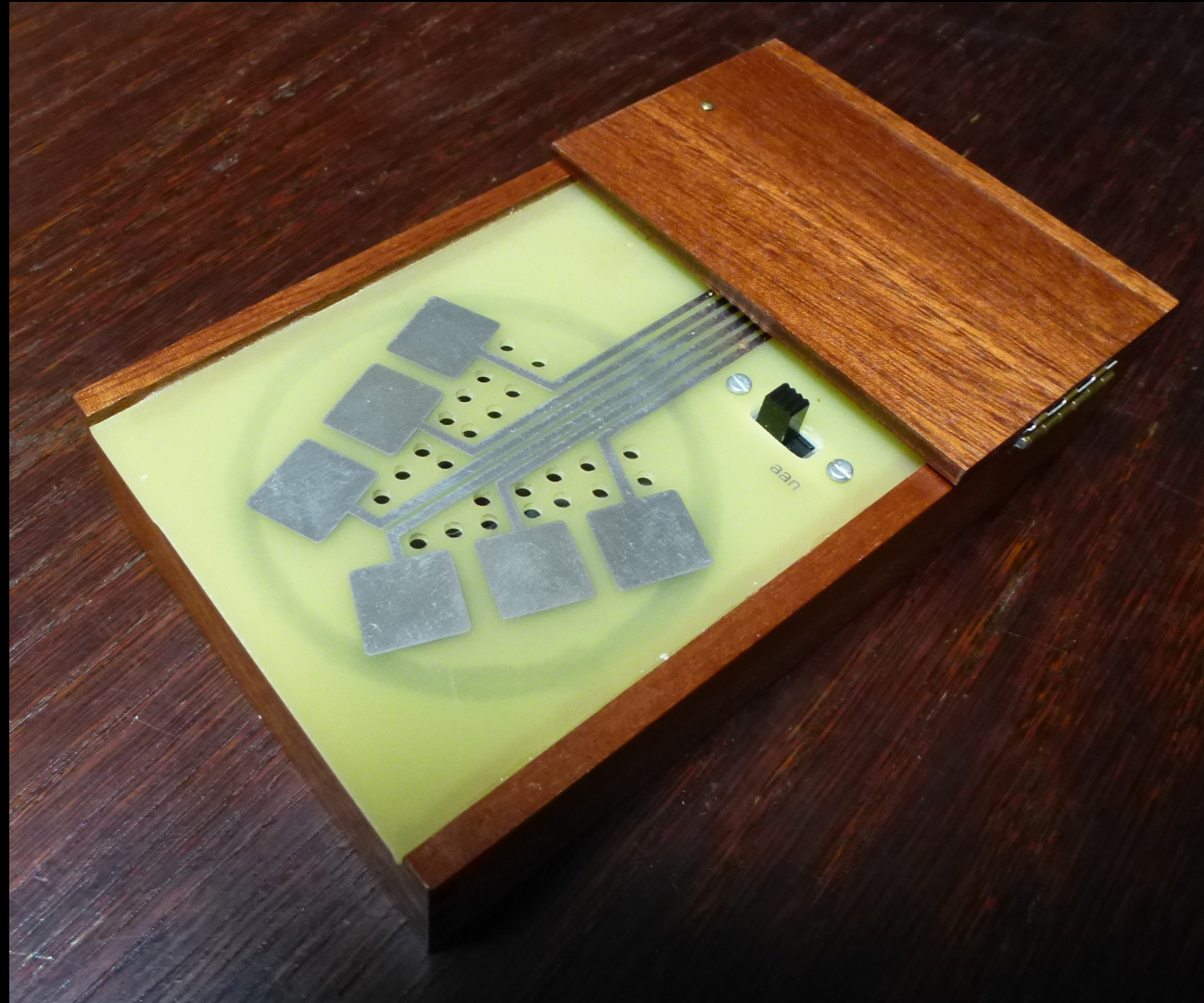


Die Crackle Box



Die Crackle Box

Historisches/Hintergründe

- Schöpfer: Michel Waisvisz (1949 – 2008)
- Datum der Entstehung: Ende 1960er/Anfang 1970er Jahre
- Entstehungsort: STEIM (Studio voor ElektroInstrumental Muziek), Amsterdam
- Einsatzzweck: Live-Elektronik/Improvisation
- Erhältlich im STEIM-Webshop für 80,- €
- Selbstbau möglich (Kosten: ca. 15 – 20 €) dank vieler Schaltungs-Layouts im Internet

Die Crackle Box

Arbeitsweise

- Zentrales Bauelement/Klangerzeugung: LM709 Operations-Verstärker, der via Kurzschlüsse in Selbst-Oszillation versetzt wird
 - Betriebsspannung: 9-Volt-Block
 - Kurzschließen der Schaltung durch Berühren der Sensorflächen mit den Fingern
 - Hautfeuchtigkeit der Finger ausreichend zum Kurzschließen der Schaltung
 - Änderung des Klangs (Lautstärke, Klangverläufe) analog zur Hautfeuchtigkeit und Druck des/der Finger
 - Klangergebnisse sind unvorhersehbar, kaum steuerbar
- daher: musikalisch intuitiv bedienbar für Jedermann

Die Crackle Box im Internet

STEIM-Homepage (www.steim.org)

(inklusive Link zum Webshop)

← → ↻ 🏠 steim.org ... 🔍 Suchen

STUDIO FOR **STEIM** ELECTRO-INSTRUMENTAL

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EVENTS
EDUCATION
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1 2 3 4 5 6

homeTONE: Sound Experiment Station

Read more...

NEWS

Steim opens Sound Art Expo

starting on thursday the 17th of may, Steim will open its doors to visitors to explore our Sound Art Expo. Every week on thursday and friday afternoon, visitors are welcome...

Read more...

Connector X: Sonology

During Connector X STEIM will once more connect with The Pentacle 15.3. This time students of Sonology (Royal Conservatory of The Hague) will make a composition especially for this multichannel...

Read more...

Connector IX

The Pentacle 15.3 surround sound During Connector IX STEIM will connect with The Pentacle 15.3. 'The Pentacle' is a powerful high fidelity mobile speaker system, developed by Fedde ten Berge...

Read more...

TWITTER
Tweets by @STEIMamsterdam

UPCOMING EVENTS

May 21
Concert: Rear Ear

June 2
**Workshop:
Introduction in
analog modular
synthesizer systems**

July 14
Summer Party

UPCOMING WORKSHOPS

June 2
**Workshop:
Introduction in
analog modular**

MUSIC

STEIM
STEIM.ORG

Die Crackle Box im Internet

www.crackle.org

(Homepage von Michel Waisvisz mit vielen Hintergrundinfos)

crackle.org home + news text and image archive for Michel Waisvisz

// home // bio // events // instruments // software // images // projects // writing // collaborations //



the 'crackle box' is back

[buy one from steim](#)

[read about it](#)

recommended:

[check out how tom bugs from bristol carries on the crackle!](#)

->>> [concert agenda](#) <<<-

current state:

touched by sound, happy to be surprised, even into extasy, searching = breathing, seeing in silence, making something work, electronica slowly becoming farming , works at steim amsterdam, no concerts for a while, tells stories, since a number of months fighting mean cells and is working on: 'life at the data farm'

projects recent and older:

preparing the release of a new cd containing duets with christine sehnaoui with mazen kerbaj as the producer!

in november 2007 presented simultaneously live at v2 in rotterdam and in second life: 'the patafone'. this is a playable sound instrument for avatars in second life !



[The Hands !](#)

r & d projects:

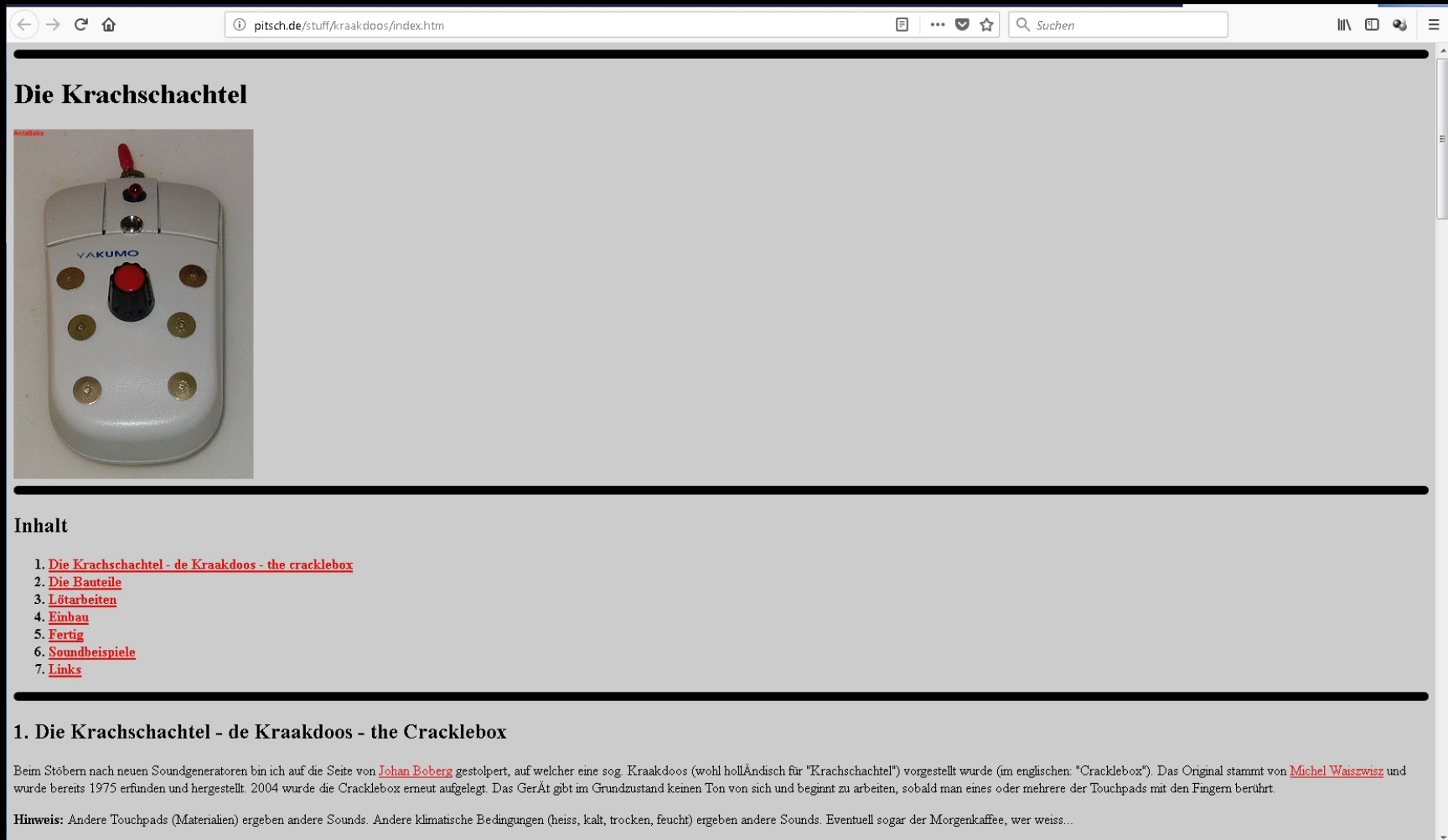
[OIK project](#)

[junXion](#)

Die Crackle Box im Internet

<http://pitsch.de/stuff/kraakdoos/index.htm>

(Selbstbauanleitung, deutsch 1/4)



Die Krachschachtel

Inhalt

- [1. Die Krachschachtel - de Kraakdoos - the cracklebox](#)
- [2. Die Bauteile](#)
- [3. Lötarbeiten](#)
- [4. Einbau](#)
- [5. Fertig](#)
- [6. Soundbeispiele](#)
- [7. Links](#)

1. Die Krachschachtel - de Kraakdoos - the Cracklebox

Beim Stöbern nach neuen Soundgeneratoren bin ich auf die Seite von [Johan Boberg](#) gestolpert, auf welcher eine sog. Kraakdoos (wohl holländisch für "Krachschachtel") vorgestellt wurde (im englischen: "Cracklebox"). Das Original stammt von [Michel Waiszisz](#) und wurde bereits 1975 erfunden und hergestellt. 2004 wurde die Cracklebox erneut aufgelegt. Das Gerät gibt im Grundzustand keinen Ton von sich und beginnt zu arbeiten, sobald man eines oder mehrere der Touchpads mit den Fingern berührt.

Hinweis: Andere Touchpads (Materialien) ergeben andere Sounds. Andere klimatische Bedingungen (heiss, kalt, trocken, feucht) ergeben andere Sounds. Eventuell sogar der Morgenkaffee, wer weiss...

Die Crackle Box im Internet

<http://www.eam.se/kraakdoos/>

(Selbstbauanleitung, englisch 2/4)

← → ↻ 🏠 www.eam.se/kraakdoos/ 133% 🔍 Suchen

DIY Kraakdoos / Crackle Box

randomvoltage.com

The Kraakdoos, or Crackle Box, was designed by [Michel Waisvisz](#) of [STEIM](#) in the seventies, the main concept being that the human body becomes a vital part of the electronics (or the other way around) while playing it. It is a touch and pressure sensitive device that squeeks and makes a lot of noise when played with. Listen to the sound examples provided at the end of this page.

I had been curious about the legendary Kraakdoos and wondered what this little noisemaker would sound like and how it was built. Eventually i found a [schematic](#) and i built one myself. Unfortunately that schematic is rather poorly drawn, so i took the liberty of redrawing it:

UPDATE I have realized that the schematic i originally published here had some errors in it due to misinterpretation of the original i used. While the old version sounds fun too, this is closer to the original. Luckily it is easily fixed if you want to try. Here is the old schematic with changes in green:

KRAAKDOOS / CRACKLE BOX (Michel Waisvisz / STEIM)

Pin 5 on the 709 should NOT be connected at all. Move pad connection to V+.

Copyright © Michel Waisvisz The 709 is NOT replaceable with a more modern op-amp

R1	1M ohm
C1	10n ceramic
C2	10n ceramic
C3	2n7 ceramic
C4	100n ceramic
C5	100µF electrolytic
C6	220µF electrolytic
U1	709 op-amp
U2	BC547
U3	BC547
U4	BC557
U5	BC557
S1	8 ohm speaker
○	touchpad

And here is what i believe to be the a correct schematic, properly drawn:

Die Crackle Box im Internet

<https://hackaday.com/2015/09/03/the-kraakdoos-musical-...>

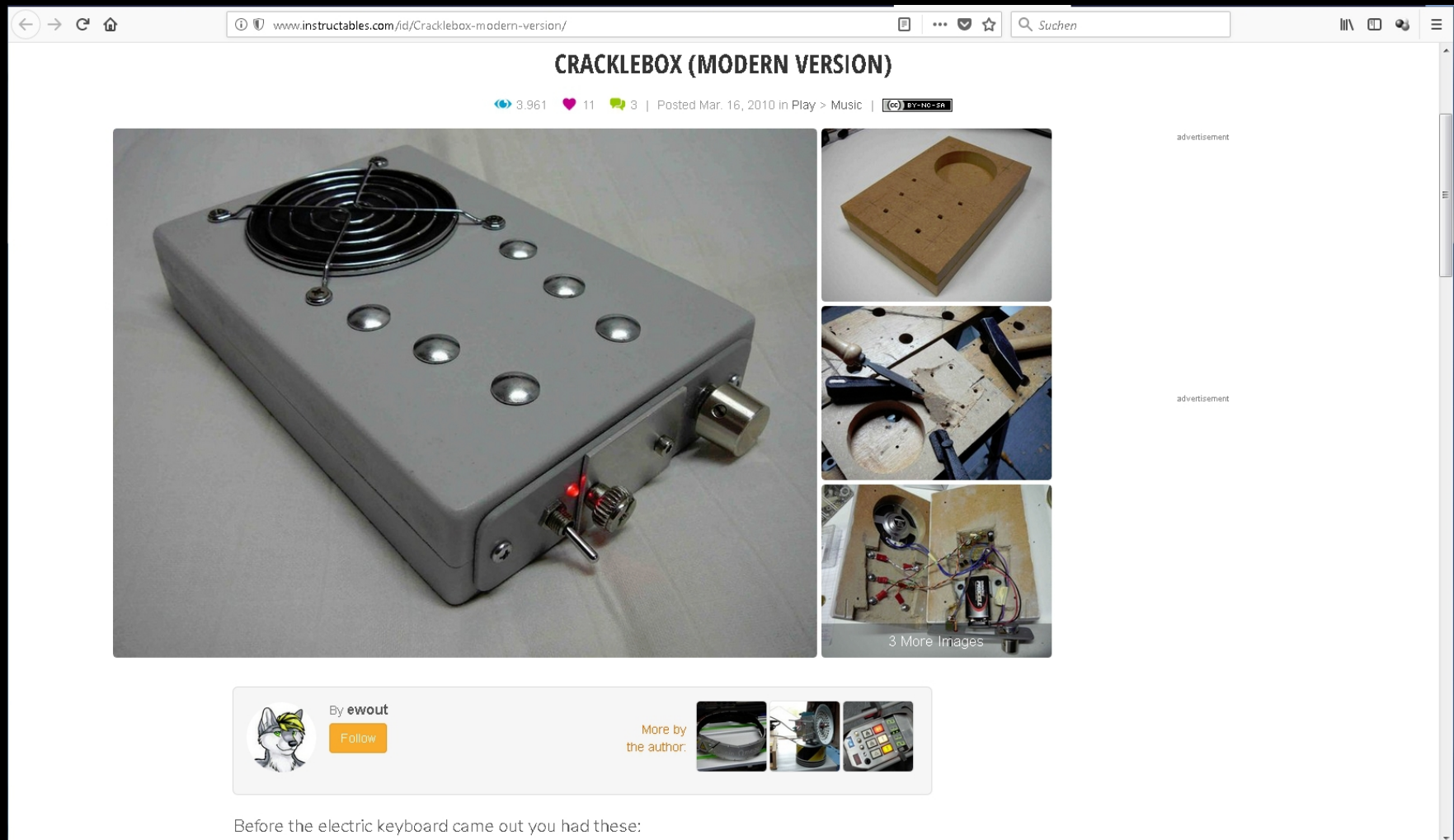
(Selbstbauanleitung/Hintergrundinfos, englisch 3/4)

The screenshot shows a web browser window displaying a Hackaday article. The browser's address bar shows the URL: <https://hackaday.com/2015/09/03/the-kraakdoos-musical-abuser-of-an-ancient-opamp/#more-16>. The page features the Hackaday logo (a skull with crossed wrenches) and the word "HACKADAY" in large, bold, white letters. Below the logo is a navigation menu with links for HOME, BLOG, HACKADAY.IO, STORE, HACKADAY PRIZE, SUBMIT, and ABOUT. The date "May 15, 2018" is displayed in the top right corner. The main article title is "THE KRAAKDOOS — MUSICAL ABUSER OF AN ANCIENT OPAMP" in bold white text. Below the title, it says "by: Nava Whiteford" and "7 Comments". The date "September 3, 2015" is also visible. A large image shows a wooden box with a green PCB inside, which is the "Crackle Box". To the right of the article is a yellow rectangular placeholder. Below that is a "tindie" logo featuring a blue dog holding a wrench, with the text "CUTTING EDGE PRODUCTS MADE BY MAKERS". At the bottom right, there is a "SEARCH" section with a search input field and a "SEARCH" button. Below the search bar is the text "NEVER MISS A HACK".

Die Crackle Box im Internet

<http://www.instructables.com/id/Cracklebox-modern-version/>

(Selbstbauanleitung, englisch 4/4)



The screenshot shows a web browser window displaying the Instructables page for 'CRACKLEBOX (MODERN VERSION)'. The browser's address bar shows the URL www.instructables.com/id/Cracklebox-modern-version/. The page title is 'CRACKLEBOX (MODERN VERSION)'. Below the title, there are statistics: 3,961 views, 11 likes, and 3 comments. The post is dated 'Mar. 16, 2010' and is categorized under 'Play > Music'. A Creative Commons license 'CC BY-NC-SA' is also visible.

The main image is a large photograph of the finished grey Crackle Box, which has a metal speaker grille on top and several small circular lights on the front panel. To the right of the main image are three smaller thumbnail images: the top one shows a wooden base with a circular cutout; the middle one shows the wooden base being worked on with a hand plane; the bottom one shows the internal electronic components, including a battery and various wires, mounted inside the box. Below these thumbnails is a link that says '3 More Images'.

Below the main image area, there is a section for the author, 'ewout', with a small avatar of a dog wearing a yellow hat and a 'Follow' button. To the right of this section is a 'More by the author:' link followed by three small thumbnail images of other projects.

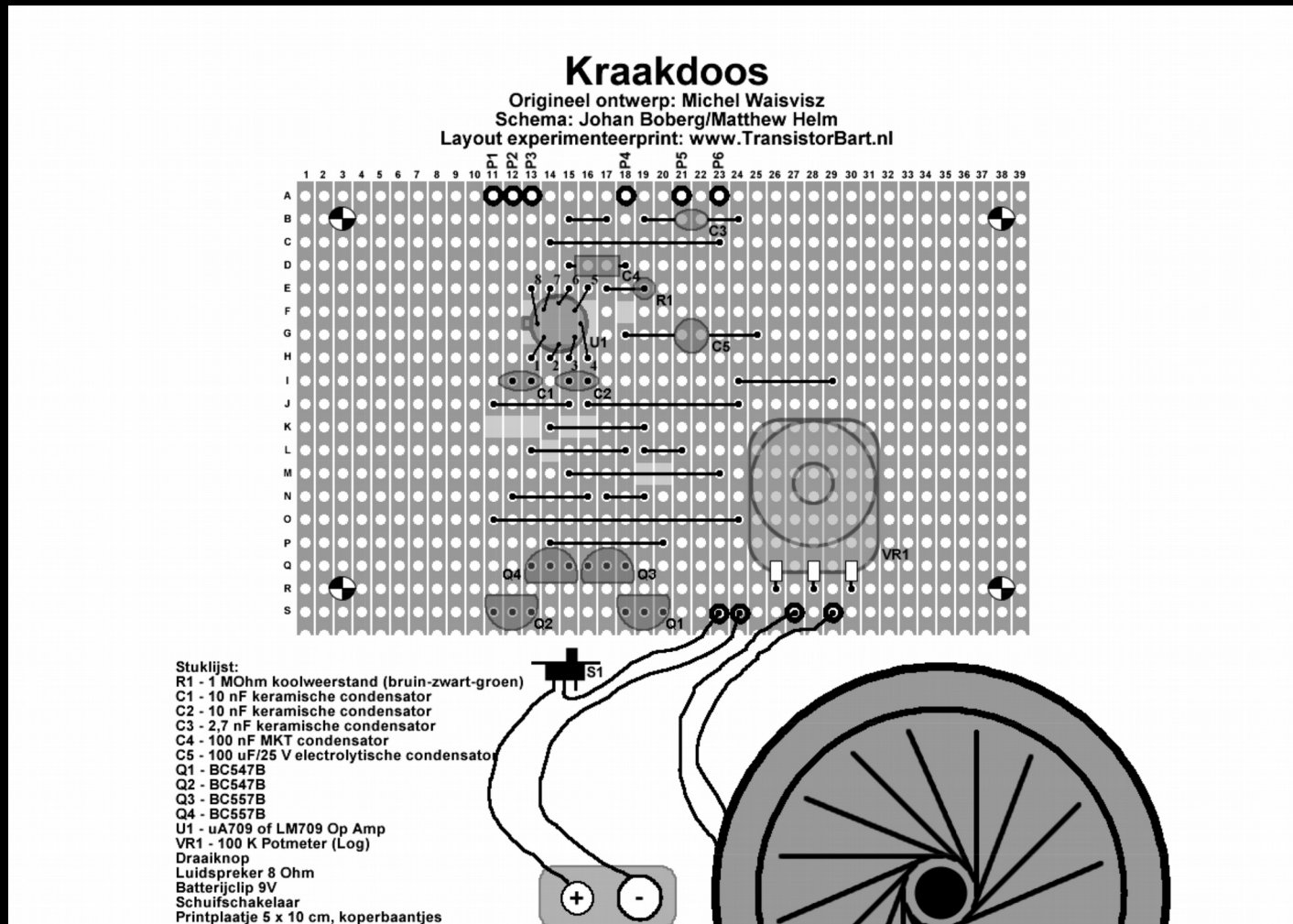
At the bottom of the page, there is a text prompt: 'Before the electric keyboard came out you had these:'.

Die Crackle Box

Schaltplan

Download auf:

<http://www.instructables.com/id/Cracklebox-modern-version/>



Die Crackle Box

Internet-Links

<https://de.wikipedia.org/wiki/Steim>

https://de.wikipedia.org/wiki/Michel_Waisvisz

<http://steim.org/>

<http://www.crackle.org/>

<https://www1.wdr.de/radio/wdr3/programm/sendungen/wdr3-open-sounds/sem-studios-der-welt-steim-amsterdam-100.html> (Sendung über das STEIM in Amsterdam)

Selbstbauanleitungen

<http://www.eam.se/kraakdoos/>

<http://www.instructables.com/id/Cracklebox-modern-version/>

<http://pitsch.de/stuff/kraakdoos/index.htm>

<https://hackaday.com/tag/cracklebox/>

2-teiliges Video-Tutorial zum Bau der Crackle Box (auf spanisch)

https://www.youtube.com/watch?v=E5F_PvfHQk4

<https://www.youtube.com/watch?v=koWzdEy8am8>