

CORON DS7 Drum Synce Clone

The **DS7 Drum Synce (DC860)** is a little analog percussion synthesizer from the 80's made by CORON. This drumsynth was dedicated to drummers : the DS7 was fixed on the border of a drum to be played/triggered by hitting the drum.

The DS7 contain a VCO +VCA chain. The VCO is modulated by a cheesy LFO and a simple decay envelope triggered by the piezzo cell pulse. The cell work as a pressure/hit sensor. It can be replaced by a jack to be used with any kind of trigg pulses or even gates. In this case the "decay" pot become a "Release" pot ... The VCA is directly controled by the envelope. The LFO can drive the VCO from slow modulation to hi-speed to produce FM like sounds.



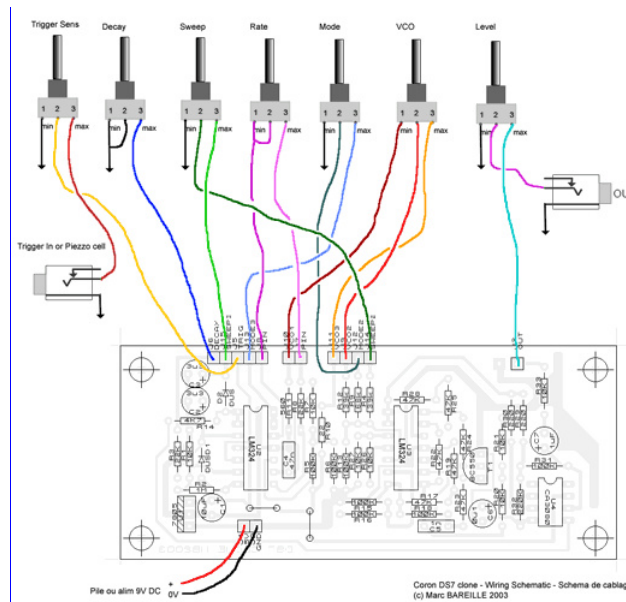
It is very simple to build, common parts only basic analog stuff inside !

[DS7 Clone Schematic \(gif\)](#)

[DS7 Clone parts list \(txt\)](#)

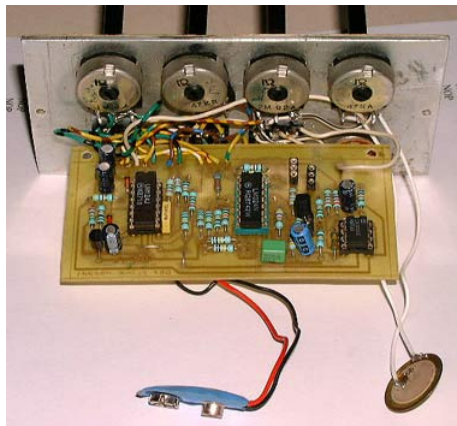
[DS7 Front Panel example](#)

The DS7 clone is builded with 2 quad opamp, 1 OTA ,1 transistor and 6 pots and only classic passive parts. The original 2SC??? VCO transistor was replaced by a BC550, many other NPNs will work here. The Trigger input (J2) was originally connected to a piezzo cell, but i prefeare a jack 6.35 even it is still a good idea to plug a cell for tests.. Any gate signal (0.5V to +5V) will work depending position of the sensitivity knob. This pot can be replaced by a preset to drive the DS7 with calibrated output trigg levels. The footswitch pedal (manual ON/OFF control of the VCA.) has been removed . The 7805 regulator is now in TO220 package : more reliable than little ones... The DS7 is powered by a 9Vto 15V PSU single power supply or a 9V battery



Potentiometers value and what they do...

VCO	47k Log	VCO initial pitch
MODE	47k Log	LFO modulation depth
SWEEP	47k Log	EG modulation depth
SPEED	1M to 2M2	LFO frequency
DECAY	470k to 2M2	EG decay time
LEVEL	47k Log	Output volume



DS7 Clone prototype picture

DS7 Sounds

The DS7 clone is directly connected to a 24/96 sound card, sampled at 44.1. No FX, EQ, super tube preamp, mega plugins or such artifacts...Just digital normalize. It is trigged with a Piezzo cell i hit with my fingers, a bit like with the original Coron DS7. *Some sounds are very short , open them with a sound editor ...*

Bass Drum1	Bass Drum2
Metal tone	Modulation
Pouic	Tuned LFO
Hi Ping	Martian Chronicles
Science Fiction	Strange

The DS7-[DS8](#) Clones Picture Gallery

Here is the "new generation" of DS7 & DS8 Drum synthesizers

All are made by DIYer's. If you have built a DS7/8 clone and you would like to see it here, just send me pictures of your realisation.

[Here is the DS8 demo videoclip made by Djthomaswhite \(UK\) .](#)



Thanks to all contributors !

*Last entries are at the end of the page
Click on pictures to enlarge.*

The red DS7 by **Chazam** (France)A great and compact 5x DS7 analog drumsynth with mix output .
Made by **Heitor** (Portugal)Blue and Red customised DS8 housed into plastic colour boxes with faders, multiples switches and tactile sensors ... :)
Builted buy **Paul Taylor** (New Zealand)



DS7 module 3U rack19"; with an epoxy multicolor front panel made by [Retrosnik](#) (USA)
Check synthi 2 page. but take time to visit Jame's incredible site too :)



A superb and sexy Dual DS7 pedal/pad designed by [Retrosnik](#) (USA).



DS7 included into a little snare drum . The DS7 is triggered by a piezzo cell..Nice vintage knobs all around ...
Builde by **Electric Lullaby** (France)



MathFlan's DS7 clone (France) . in a large low profile box with Moog like style knobs :)



Very small but nice design !This DS7 clone come from the North : Builde by **Sakari Jantti** (Norway).



Dan's indestructible Dual DS8 in a strong yellow metal box with push buttons fire manually each section.



Made by **Freaksomnia** from the Netherlands: a nice DS8 with many addons:

"it has extra led for trigger activity, extra pot for noise volume and at the front there is an extra 9 V DC output so i can connect my DS8 and my tr626 to the same powersupply"

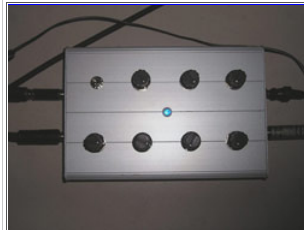


A DS8 from Italy by the **Theremin Team** More pictures/infos are available at

<http://theremin.altervista.org/electronics.html>

The case is very strong (12/10 steel) and come from an old pwr supply for antenna amplifier.

The top is plexiglass over a thin colored sheet. The CV in have the attenuator trimmer and we are building a ribbon controller to drive both the CV input and the trigger in



Another very nice DS7 from The Netherlands made by **Frank De Groodt**



Housed into an nice and desig aluminium box with a blue led and the CV input.













DS8into an Hammond alu box with tiny Moog style knobs comes from Belgium provided by **David Herard**.



Roglok's DS8 clone : with external Mini-pad , CV mod, psu switch




A compact DS7 into a rectangular pad box Made in France by **Jean Rasta**

	Between the Tambourine and the flying saucer, another very nice DS7 designed by Jean Rasta (France)
	Superb DS7 by Dr Mika (Portugal) <i>YouTube video</i> 
	Karlbatteryj (Catalogne) - DS7+ DS8 based on recycled materials with floppy drive pads/sensors. Robotic players !
	DS8 clone with external piezzo pad designed by Heiko (Germany)
	DS7 by Zion_t (Germany) Soundmen style ! More pics, infos, siren ... www.myspace.com/zion_t
	TR8 by Troots (France) a DS8 into a 2U 19" rack with a pad on the right of the front panel. <i>Special Reggae/Dub Sound System !</i> www.igrowrecords.com
	The TR7 by Troots (France) is a DS7 housed into a compact alu box. All Troots devices are available already assembled and tested on order here
	Compact DS8 , with a CV input builded by Miguel Garcia (Spain)
	1U Rack 19" DS7 with piezzo pad on the right Builded by Shoud (France) Inside view clic here

	<p>DS7 by Nordine SOM4TIK (France)</p> <p>Housed into a plastic box with integrated piezzo pad.Very compact !</p>
	<p>Cookie box DS7 pad</p> <p>by Nordine SOM4TIK (France)</p>
	<p>The MUTANT DS7 a 'slightly' augmented DS7 clone by Umschmitt (Germany)</p> <p>in fact this is the most tweaked DS7 of the word !</p> <p>All informations and more about here :</p> <p>http://electro-music.com/forum/viewtopic.php?t=6386&start=275</p>
	<p>Double DS8 stompbox with external triggers and PSU . Used as a stomp box BD/SD in a country-rock band .</p> <p>by Dr Stefan W. (Germany)</p>
	<p>A beautiful and full featured double DS8 module in 3U Eurorack format by Daniel Tomczak (USA)</p> <p>Bing Carbon Microphones www.bingcarbon.com</p>
	<p>The Drumolog 404</p> <p>A big stand alone drumb box composed of 4 x DS8 in a box , with integrated mixer and delay FX !</p> <p>Made by Avital (Netherland)</p>

Last update 01/2013

DS7 & DS8 Clones pcbs + Construction manual
are available on [order](#) 



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