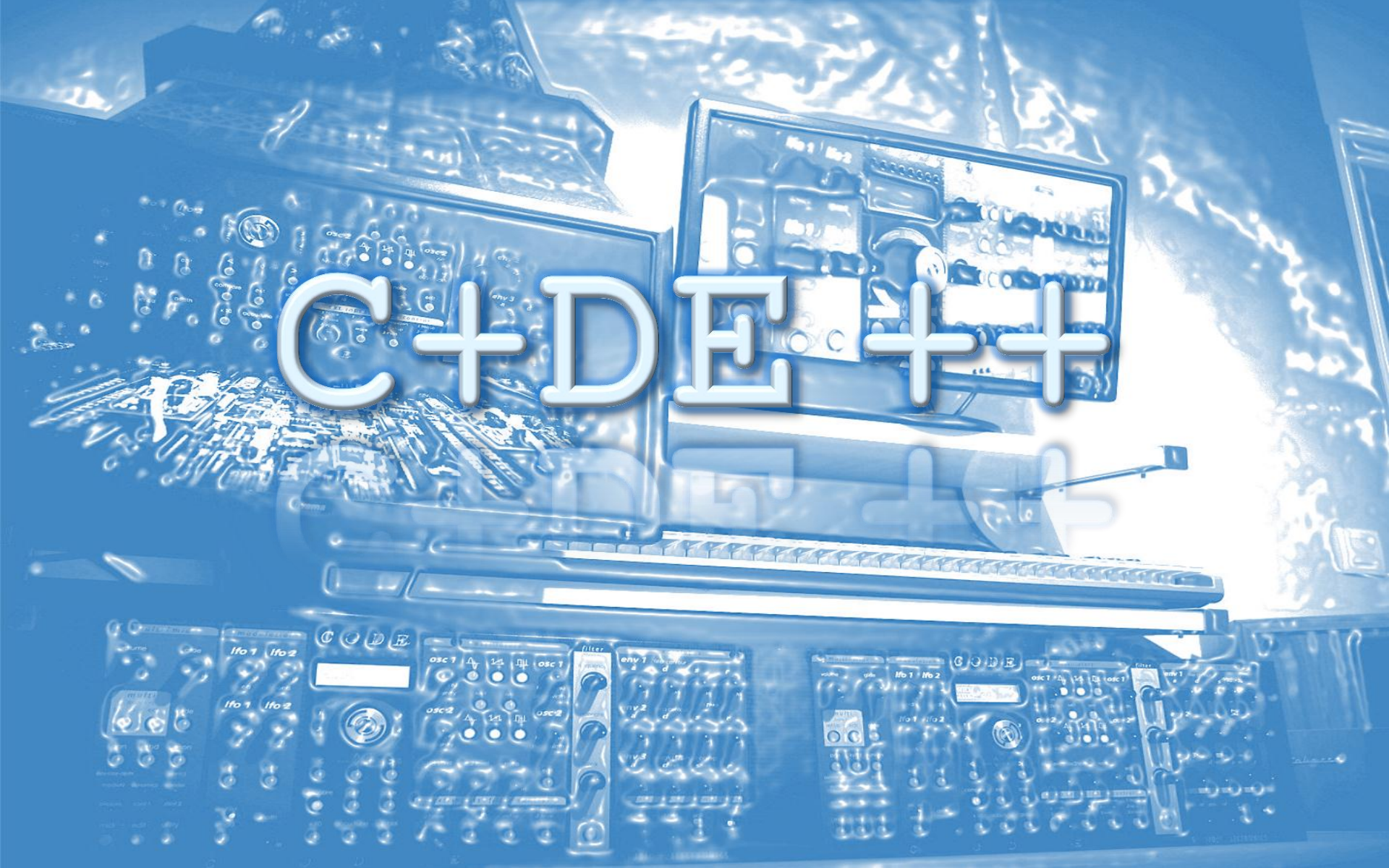


# C++ D E ++



# C+DE ++

*At a glance*

C+DE ++ is intended for sound designers working with Studio electronics C.O.D.E. synthesizer.

C+DE ++ gives full control in real-time on all sound parameters of the C.O.D.E.

C+DE ++ is a light standalone application. No installation procedure required.





# C+DE ++

Presentation

C+DE++ is a real time synth editor that gives you full control on all parameters of your Studio electronics C.O.D.E. This software free up your creativity in sound design and allow you to get more of your synth.

```
...arianType)  
_SINGLEMULTI:  
dest.ptr_multiSingle = (P_MULT  
source.ptr_multiSingle = (P_MULT  
memcpy(&dest.ptr_multiSingle->mul  
break;  
_SINGLEPATCH:  
dest.ptr_patchSingle = (P_PATCHS  
source.ptr_patchSingle = (P_PATCHS  
memcpy(&dest.ptr_patchSingle->patc  
break;  
_PATCHBANK:  
dest.ptr_patchBank = (P_PATCHB  
source.ptr_patchBank = (P_PATCHB  
memcpy(&dest.ptr_patchBank->pa  
break;  
_MULTIBANK:  
dest.ptr_multiBank = (P_MULTIBANK  
source.ptr_multiBank = (P_MULTIBANK  
memcpy(&dest.ptr_multiBank->mul
```

C+DE ++, a multi-layer synth editor : real time editing, all sound parameters gathered in a comprehensive page. Each patch and multi has its own edit buffer, it's always possible to compare the edited sound to the original one.

C+DE ++ has MIDI learn capabilities : assign any sound parameter to any MIDI cc in a quick and simple way. Possibility is given to assign one MIDI cc to several sound parameters (amazing when combined with grotesque cc behavior function).

# C+DE ++

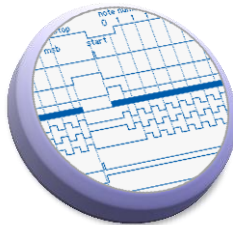
Presentation

C+DE ++ is a library manager :  
rename and arrange patches to  
create your own bank, chase  
duplicates, backup/restore single  
patch or full bank as sysex file.



C+DE ++ offers creative functions :  
for predictable or unpredictable  
results in sound creation (patch  
reset, accidental patch generator,  
fade patches, blend patches).

C+DE ++ includes a MIDI clock  
generator : it makes easy sound  
creation based on LFO or PAN rate  
synced to MIDI clock.





# C+DE ++

Patch bank browser

Multi-layered sound editor +| Studio electronics C.O.D.E.

1 REUELATION 1-8	17 WHEN THEY DOUBT	33 MY LOVELY REED	49 ANOPAZED
2 WHIRLY BIRD	18 IF IT'S STEVIE	34 MY LOVELY REEDA	50 HIGH DESERT SAGE
3 WHIRLY BIRD CP30	19 IF IT'S STEVIE 2	35 LOU'S REED	51 JEFFREY'S DANCE
4 WHIRLY FIRE BIRD	20 MAGIC HIGH PASS	36 FORGOTTEN PAINS	52 PRIMITIV NOTION
5 WHIP IT FADE-IN	21 SENIL'S SYNTHI	37 RITUAL MEMORY	53 BOOM DA BASS
6 SINATRALIKEBUZZ	22 I AM SINGLE...	38 LOCAL STRANGS	54 GMF MESSAGE B 08
7 SLINKI'S MOOD	23 DELAYED REALITY	39 SWEPTUP	55 I AM SINGING 08
8 ZIMMERMAN'S STAB	24 LEARNING EFFECT	40 OBIE STRINGS	56 BAD BAD THANG
9 BEETLE BOX	25 ODE2DAP5WAHSWEEP	41 VILLAGE STRINGS	57 PROUD TO BE PHAT
10 BEETLE BOX MINI	26 TOUCH THAA SKY	42 VILLAGE STRINGS2	58 ISN'T SHE LOVELY
11 BEETLE BOX MOVER	27 MY LOVELY HORN	43 ORGANY KAOS	59 SUPERSTORM DECAY
12 ROYAL BLOOD LINE	28 MY LOVELY HORN 2	44 STELLAR PARFISA	60 NEWS 4 CARMEN
13 SWEET MURCHIE	29 ETEUVIEN	45 PIGALLE PARTY	61 REPRISAL FRAME
14 SWEET MURCHIED	30 CS-80 220 HORNS	46 HUBBLE'S TELE	62 LATENT ECHO
15 HIT & RUN '08	31 JP INFORMED	47 MELLOTRON MSR 08	63 OVERTONED
16 USEMODWHEEL&ARPG	32 CHOCHOLATE TOUCH	48 ANODAZED	64 THAT'S SWELL GUY

1 . REUELATION 1-8 Owner : getmoreofyourcode@free.fr

uni:Off	octav:MID	lv1	freq	tri	saw	sqr	pwm				
voice:EIGH	prior:LOW	127	osc1	24	On	Off	On	67	fine	mode	env1
filter:MINI	vmod:CYCL	88	osc2	36	On	Off	On	57	5	NORM	0
sync:Off	mtrg:OFF	0	noise			cutoff:23	reso:62	Invt			
sub:Off	tune:100%					Env1	amt:117	track:91	OFF		

midi clock : Off | voice : | Poly : Off | midi in :


With the mouse or using the direction arrows of your computer's keyboard, it's quick and easy to browse a patch bank. The patch selection on the synth is set accordingly in real time. The current position is highlighted in the list. The bottom of the page gives an overview of the main sound parameters and are editable.


Lots of creative functions are available in this view : patch init (in 4 different methods), patch rename, patch reorganization, mix 2 patches together to create a new sound, unload a patch as a sysex file, load a sysex file (single patch or a full bank), manage midi clock, ...

# C+DE ++

Patch sound parameters

```
Multi-layered sound editor +| Studio electronics C.O.D.E.
1 . REVELATION 1-8
uni:Off | octav: MID | lol   freq tri  saw sgr  pwm
voice: EIGH | prior: LOW | 127 osc1 24  On  Off  On  67  fine mode env1
filter: MINI | vmod: CYCL | 88  osc2 36  On  Off  On  57  5 NORM  0
sync: Off | mtrg: OFF | 0  noise          cutoff: 23  reso: 62  Invt
sub: Off | tune: 100% | xmod: depth  Env1 amt: 117 track: 91  OFF
[000]: Ucf
lfo dest1  dest2  dest3  rate wave mode sync key gun | wave : TRI
1  FILT=31  RESO=3  PW1 =4  21 TRI MONO SELF DN OFF | key : OFF
2  PRE1=1  PW2 =8  RESO=5  94 TRI MONO SELF DN | sync : SELF
Ev3 LF1R=100 OFF =0  OFF =0
           Envelopes 123
           dyn 35 107 0
           dly 0
           Atk 9 17 0
           Dec 99 0 92
           Dk2 0 127 0
           Sus 0 127 0
           Rel 97 117 127
           1: 0 55 127
           2: 0 53 127
           3: 0 51 127
           4: 0 56 127
           5: 0 52 127
           6: 0 48 127
           7: 0 54 127
           8: 0 49 127
glide : On      glide mode : REG  glissando : Off  dyna sensitivity: 0
time  : 42     glide dest  : O&F  auto glide: Off  auto interval : 0
midi clock : Off | voice : | Poly : Off | midi in :
```

 This page displays all the sound parameters of a patch and let them edit all. Use the midi learn function to assign the sound parameters you want to your control surface, preferably those hidden in menus. This allow you create sounds in an intuitive way, without using menus on the synth's front panel, all in real time, and while playing.

 C+DE++ remains synced with the synth in real time by the mean of sysex dialog. All edits are captured and replicated to the synth, several times by second. Thanks to Studio electronics to have equipped the C.O.D.E with a fast and stable MIDI engine.

# C+DE ++

Patch rename function

```
Multi-layered sound editor +| Studio electronics C.O.D.E.
1 REUELATION 1-8      17WHEN THEY DOUBT    33MY LOVELY REED      49ANOPAZED
2WHIRLY BIRD         18IF IT'S STEVIE     34MY LOVELY REEDA     50HIGH DESERT SAGE
3WHIRLY BIRD CP30    19IF IT'S STEVIE 2  35LOU'S REED          51JEFFREY'S DANCE
4WHIRLY FIRE BIRD   20MAGIC HIGH PASS   36FORGOTTEN PAINS    52PRIMITIV NOTION
5WHIP IT FADE-IN    21SENIL'S SYNTHI    37RITUAL MEMORY       53BOOM DA BASS
6SINATRALIKEBUZZ    22I AM SINGLE...    38LOCAL STRANGS      54GMF MESSAGE B 08
7SLINKI'S MOOD      23DELAYED REALITY   39SWEPTUP             55I AM SINGING 08
8ZIMMERMAN'S STAB   24LEARNING EFFECT   40OBIE STRINGS        56BAD BAD THANG
9BEETLE BOX         25ODE2DAP5WAHSWEEP  41VILLAGE STRINGS     57PROUD TO BE PHAT
10BEETLE BOX MINI    26TOUCH THAA SKY    42VILLAGE STRINGS2    58ISN'T SHE LOVELY
11BEETLE BOX MOVER   27MY LOVELY HORN     43ORGANY KAOS         59SUPERSTORM DECAY
12ROYAL BLOOD LINE  28MY LOVELY HORN 2  44STELLAR FAFISA      60NEWS 4 CARMEN
13SWEET MURCHIE     29ETEVIEN           45PIGALLE PARTY       61REPRISAL FRAME
14SWEET MURCHIED    30CS-80 220 HORNS   46HUBBLE'S TELE       62LATENT ECHO
15HIT & RUN '08     31JP INFORMED       47MELLOTRON MSR 08    63OVERTONED
16USEMODWHEEL&ARPG  32CHOCOLATE TOUCH   48ANODAZED            64THAT'S SWELL GUY
New name : REUELATION 1-8 [TAB]=random ; ENTER=proceed, ESCAPE=cancel
1 . REUELATION 1-8      Owner : getmoreofyourcode@free.fr
uni:Off | octav:MID | lvl | freq | tri | saw | sqr | pwm
voice:EIGH | prior:LOW | 127 osc1 24 On Off On 67 fine mode env1
filter:MINI | vmod:CYCL | 88 osc2 36 On Off On 57 5 NORM 0
sync:Off | mtrg:OFF | 0 noise | cutoff:23 | reso:62 | Invt
sub:Off | tune:100% | Env1 amt:117 | track:91 | OFF
midi clock : Off | voice : | Poly : Off | midi in :
```

No need to stress the Q knob of your synth to rename a patch (or a multi). You can simply do it using your computer's keyboard. And in case you are not inspired for a new name, C+DE++ can propose you millions of unique names.

⚡ Icing on the cake, lowercases are allowed !

# C+DE ++

## MIDI map function

```
Multi-layered sound editor +| Studio electronics C.O.D.E.
M I D I  M A P
uni:--- | octav:---- | lvl   freq tri  saw sqr  pwm
voice:--- | prior:---- | --- osc1  ---  ---   fine mode env1
filter: x0f | vmod:---- | --- osc2  ---  ---   Invt
sync:--- | mtrg:---- | --- noise  ---  cutoff:--- reso:--- Invt
sub:--- | tune:---- | xmod:depth Env1 amt:--- track:---
osc1:[---]:vcf
lfo dest1  dest2  dest3  rate wave mode sync key gun | wave : ---
1  -----  -----  -----  -----  -----  -----  -----  -----  -----  | key : ---
2  -----  -----  -----  -----  -----  -----  -----  -----  -----  | sync : ---
Ev3 -----  -----  -----  -----  -----  -----  -----  -----  -----  | pos rate dpth
                                     Envelopes 123
modwhl : dest1  dest2  | dyn --- --- | 1: --- --- ---
dynamics : -----  -----  | dly --- --- | 2: --- --- ---
bender : -----  -----  | Atk --- --- | 3: --- --- ---
pressure : -----  -----  | Dec --- --- | 4: --- --- ---
cont1[----]: -----  -----  | Dk2 --- --- | 5: --- --- ---
cont2[----]: -----  -----  | Sus --- --- | 6: --- --- ---
                                     | Rel --- --- | 7: --- --- ---
                                     | 8: --- --- ---
glide : --- glide mode : --- glissando : --- dyna sensitivity: ---
time : --- glide dest : --- auto glide: --- auto interval : ---
MIDI MAP : cycle thru fields, ENTER=cancel map, ESCAPE=done !
midi clock : Off | voice : | Poly : Off | midi in :
```

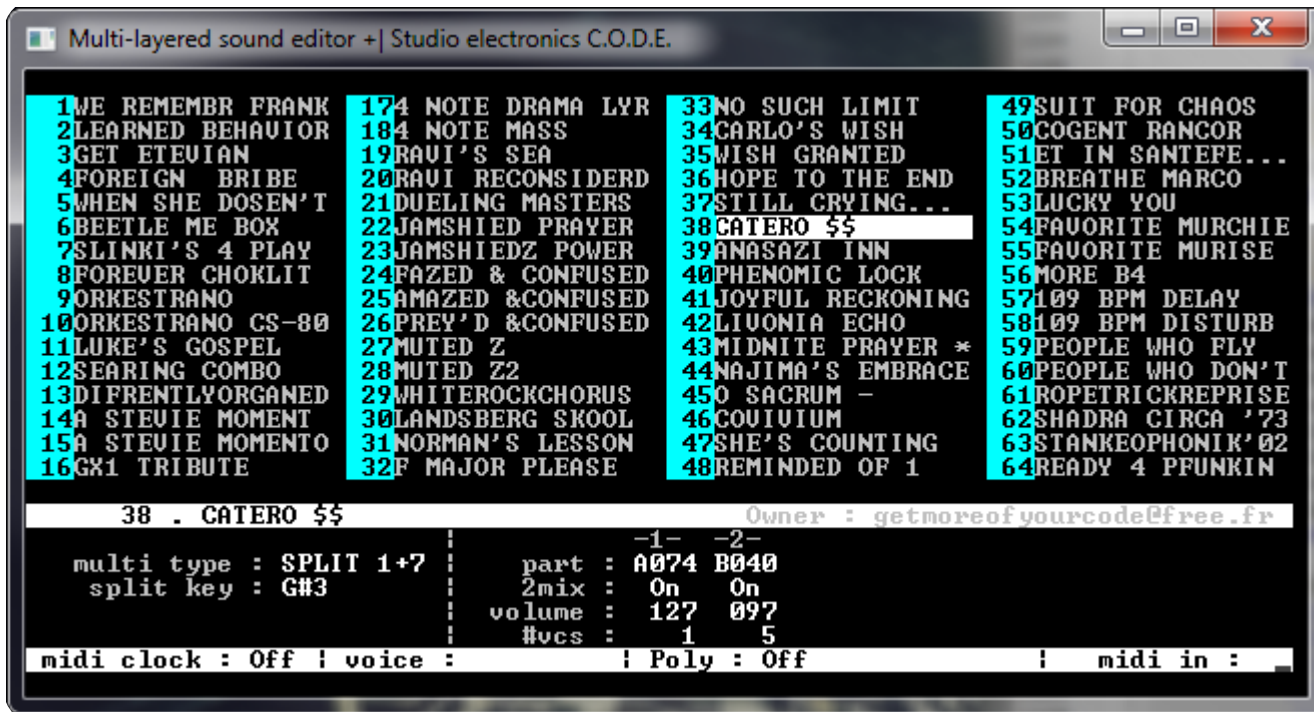
† Each of the 144 sound parameters of the C.O.D.E are assignable to MIDI CC.

🔗 This page gives an overview of the parameters assigned to MIDI CC. It allows to cancel assignment or to retrieve the parameter corresponding to the knob you are currently using on your control surface with a dynamic color change.



# C+DE ++

Multi bank browser

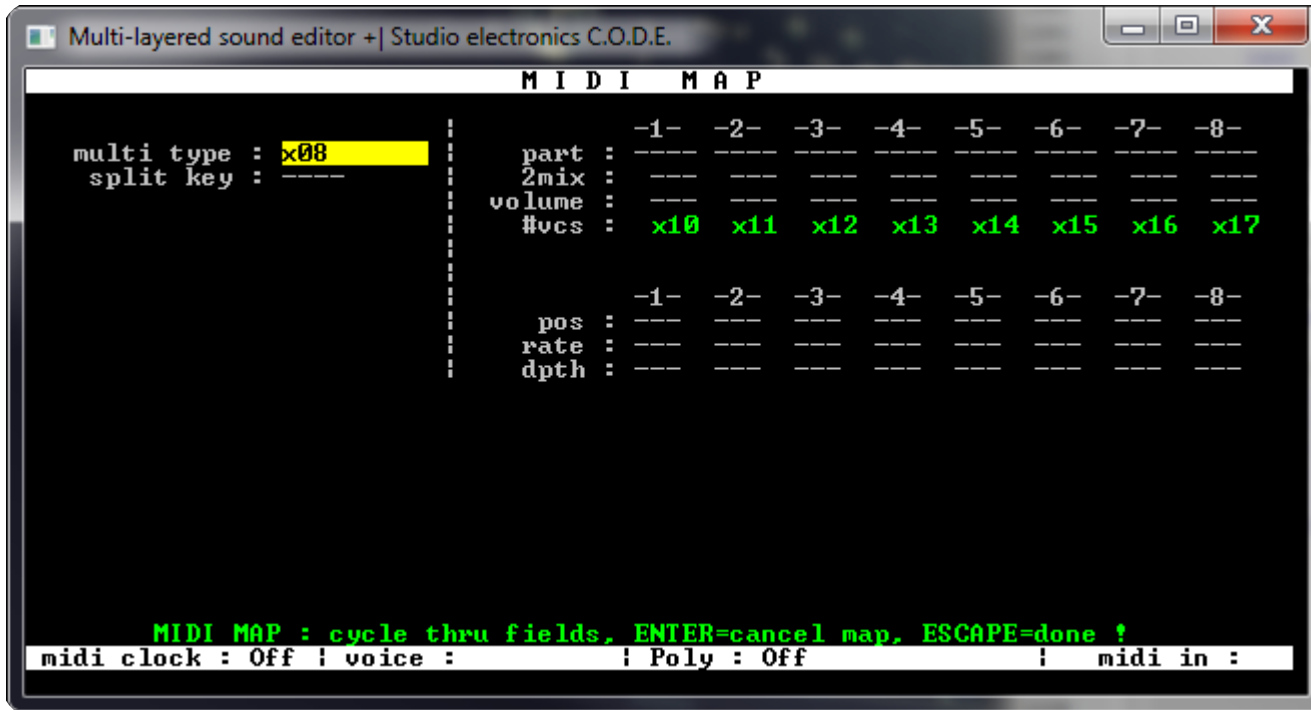


As for a patch bank, browsing a multi bank is quick and easy. The multi selection on the synth is made accordingly in real time. The current position is highlighted in the list. The multi parameters are displayed at the bottom of the page and are editable in real time.

No need to use the front panel and the menus of your synth to build a multi. Use the midi learn function to assign the multi parameters to your control surface, that's it. You are now able to explore and tweak the patch combinations offered by this powerful function. And all in real time.

# C+DE ++

*MIDI map function*



Multi parameters are all assignable to MIDI CC.

Yes, with C+DE++, build a multi without using the front panel of your synth, is possible !


# C+DE ++

*Help screen*

```
Multi-layered sound editor +| Studio electronics C.O.D.E.

[a] accidental patch generator
[b] bulk load sysex files into synth)
[c] toggle midi clock Off/On (use + & - to change BPM)
[d] drag current patch to the position you want using direction arrows
[e] Initialize the current patch (alternative methods with [i] & [t])
[f] fade between two patches (b] blend 2 patches randomly)
[g] grotesque cc behaviour
[l] midi learn
[m] midi cc map
[n] manually rename the current patch (h] self rename all patches)
[o] synth's memory initialization with a new session
[p] toggle poly mode Off/On (in multi mode)
[q] save session and quit !
[r] recover current patch from PROGRAMMED layer
[s] tag current patch for swap (tag 2 patches and press ENTER to proceed)
[u] unload current patch or full bank as sysex file
[x] load a sysex file (at current position or full bank)
[W] write current patch to PROGRAMMED layer
[v] verify duplicate within banks and libraries.
[Tab] toggle between PROGRAMMED & EDITED patch layers
[ ] switch to patch detail page.
      Press any key to continue.

midi clock : Off ! voice :      ! Poly : Off      ! midi in :
```

 An overview of all the user commands available ...





ask for a demo version to  
[getmoreofyourcode@free.fr](mailto:getmoreofyourcode@free.fr)