

I think the Behringer FCB1010 with UnO Eprom is the best footcontroller price/quality you can get. When using the Ripwerx Software it's also easy to program once you understand the logic of MIDI and the FCB1010.

## PROJECT

Let's say we want to program the FCB1010 for an Axe-FX (you can use any MIDI-device in a similar way).

### What do we want?

Program 6-10: stompbox mode (stomp, mod, delay, reverb, wah on/off) Program 1-5: program change with tap tempo Expression A: wah Expression B: volume

## How do we do that?

Program 6-10 will have the stompboxes discribed as above. Program 1-5 will handle the PC, tap tempo, expression pedal A and B and the state of the stompboxes (ON/OFF).

## What do we need?

We need to know the CC's (control numbers) of the MIDI-device we want to control. For the Axe-FX these are free to choose, so let's assume they are:

Stomp/Drive	26	
Mod	50	
Delay	28	
Reverb	36	
Wah	43	
Wah Freq	4	
Volume	7	
Тар	64	
Delay Mix	3	(we use that later to toggle expression pedal A)

# Connecting

In order to work we need:

Software (RipWerx) Midi-device (MIDI OUT computer -> MIDI IN fcb and MIDI OUT fcb -> MIDI IN computer) Enable receive sysex on the fcb1010 (only once) (this is explained in "fcb1010 making uno ready for use.pdf" which can be found on http://www.voes.be/fcb1010)

## Start the Ripwerx software and create a new Blank Uno Message file

File	Edit	MIDI	Tools	Help
N	ew Bla	nk UnO	Messag	e Ctrl+N
0	pen			Ctrl+O
S	Ctrl+S			
S	Ctrl+A			
S	ave Re	port		
F	xit			Ctrl+X

# Adjust the view options

ile Edit MIDI	Tools Help				
resets Global S	General Options				
Edit Presets	Preset View Options	Ctrl+P			
	Show Report	Ctrl+R			
	Check FCB1010 Firmware Version	Ctrl+F			
	Perform MIDI Loop Test	Ctrl+L			
	MIDI Watch Window	Ctrl+W			
	MIDI Message Builder	Ctrl+M			

Important: these are only view options, they don't do anything.

since we only use 1 device there's no need to use more than one program change per patch, so uncheck P2-P5.

E1-2 should be checked, these are the expression pedals.

We don't use notes and don't use the switches so we uncheck them also.

In the UnO functions select only CC toggle, Expression Pedal Toggle and Stomp-box options. Al the other we don't use in our case.

Preset Editing Vi	iew Options			X
Select Functions	to Include in Preset V	liew		
PRG CHG 1	PRG CHG 2	PRG CHG 3	PRG CHG 4	PRG CHG 5
CNT 1	CNT 2			
EXP A	EXP B			
NOTE				
SWITCH 1	SWITCH 2			
Transpose				
Stomp-box				
	and Options (PRG an A Toggle Options	d CNT Functions)		
		OK Canc	el	

# **Global settings**

Now we can set the global settings like picture below.

Select FCB1010 Settings	
<ul> <li>MIDI Merge Mode</li> <li>Running Status Mode</li> <li>Disable Tap-Tempo CC Messages</li> <li>Invert SW1 Relay Function</li> <li>Invert SW2 Relay Function</li> <li>Block Repetative PC Messages</li> </ul>	<ul> <li>Pirect Select Mode</li> <li>SW1 Latch</li> <li>SW2 Latch</li> <li>SW2 Latch</li> <li>Stomp Box Mode</li> <li>Stomp Box Upper Row</li> </ul>
Select Vendor ID for Sysex commands	0 32 2 100 C

Let's explain some things:

# Stomp Box Mode Stomp Box Mode Stomp Box Upper Row

Of course we want that on. Here you select if upper or lower row will act as stompbox.

## Block Repetative PC Messages

P Block Repetative PC Messages

Since we want to use the Program-change buttons (buttons 1-5 on the fcb1010) also as TAP-tempo button we only want the first time to send a program change and all the other times CC's (like tap-tempo)

# **Editing Presets**

iets G		ettings													
	_	CHG 1		CNT 1			CNT 2			EXP A			(P B 1 🗘		Stomps
S-6		96 🤤	26 😂	127 😂 🔽	0 🗘	0 0	0 🗘 🗌	0	7 🗘	0 🗘 12	27 🗘 🗌	14 🗘	0 0	127 🗯	n/a
S-7		97 😂	27 🛟	127 📚 🔽	0 🗘	0 0	0 0	0	7 🗘	0 🗘 12	7 🔍 🗌	14 🗘	0 🗘	127 🗘	n/a
S-8		98 🗘	28 🗘	127 😂 🔽	0 🗘	0 🗘	0 0	0	7 🗘	0 🗘 12	7 🗘 🗌	14 🗘	0 0	127 🗘	n/a
S-9		99 😂	29 😂	127 😂 🔽	0 🗘	0 0	0 🗘 🗌 🚺	0	7 🗘	0 💲 12	27 🗢 🗆	14 0	0 0	127 0	n/a
S-10		100 🗘	30 😂	127 🛟 🔽	0 🗘	0 0		0	7 \$	0 😂 12	27 🗘 🗌	14 0	00	127 😂	n/a
0-1		1 🗘	64 😂	127 🗘 🗖	127 🗘	43 😂	0 🗘 🗖		4 🗘	0 🗘 12	27 🗘 🗖	7 🗘	0 🗘	127 😂	
0-2		2 🗘	64 💲	127 😂 🗖	127 🗘	43 🗘	0 🗘 🗌		4 🗘	0 😂 12	27 📚 🗖	7 🗘	0 🗘	127 🗘	
0-3		3 🗘	64 😂	127 😂 🗖	127 😂	43 😂	0 🗢 🗖	0	4 🗘	0 😂 12	27 🛟 🗖	7 🗘	0 🗘	127 😂	
0-4		4 🗘	64 🛟	127 😂 🗖	127 🗘	43 😂	0 🗢 🗖	0	4 🗘	0 🗢 12	27 📚 🗖	7 💲	0 🗘	127 💲	0000
0-5		5 🗘	64 🗘	127 🗘 🗖	127 🗘	43 🗘	0 🗘 🗖		4 🗘	0 🗘 12	27 🗘 🗖	7 🗘	0 😂	127 🛟	

This is how a preset-map could be. Let's examine them a little bit

## MIDI Channels

PRG CHG 1	CNT 1	CNT 2	EXP A	EXP B
1 🗘	1 🗘	1 🗢	1 🗘	1 🗢

PRG CHG, CNT 1, CNT 2, EXP A and EXP B are respectively Program Change 1, CC control 1 & 2 and Expression pedal 1 & 2.

Since we have only one device, these should all be the same. Here we choose 1, which stands for MIDI-channel 1 (there are 16 MIDI channels). It's obvious that your MIDI-device you want to control should be on the same MIDI-channel (1 here). Or you could set your MIDI-device to OMNI which means that it will recieve any MIDI-message regardless of the MIDI-channel.

#### Stompbox

S-6 96 26 26 127 2 0 2		7 \$ 0 \$ 127 \$ 0 14 \$	0 🗘 127 🗘 n/a
26 🗘 127 🗘 🗸	D 🗢		

Here we tell that if we press button 6 on the FCB1010 we will send a CC 26 with value 127. What does this mean? Well CC 26 in our case is the control number for the Stomp/Drive module of our MIDI-device.

We tell it that if we push it the first time (light on) it will transmit 127 which is the maximum value and thus means put the stomp/drive on. If we push it again (light out) it will transmit 0.

We don't want to send anything other than that, so all the other stuff is unchecked.

Program Change			
0.5 🗸 5 🗘 🗸 64 🗘 127 🗘 127 🗘 🗸 43 🗘	0 🗘 🗖 💭 💭	4 🗘 0 🗘 127 🗘 🔽 🗸	7 🗘 0 🗘 127 🗘 🔍 🗸
✓ 5 ♀ 64 ♀ 127 ♀ 127 ♀			

This is the picture of button 5 on the FCB1010 (bank 0). We tell it to transmit a program change (5) to our MIDI-device.

CNT1 is also checked. This is a very nice feature which gives you an extra stompbox. I use it here to send TAP-tempo (which is control numbur 64 on my MIDI-device). The first time I press button 5 on the FCB1010 it will transmit a program change, after that it will transmit CC 64 untill I select another program (ex. button 3). (you could do this also for CNT2. I used this to turn the Wah off. We didn't do this here because we already assigned button 10 to wah on/off)



Expression 1 is assigned to CC4 (wah freq) and goes from 0 (minimum) to 127 (maximum). Expression 2 is used in a similar way for CC7 (volume control). Both are turned.

Now the last items are maybe the most difficult to understand.



Here we tell that if we push button 5 on the FCB1010 we turn stompbox 1-2-4 (drive-mod-reverb) and 5 (wah) OFF and stompbox 3 (delay) ON.

Now this is very essential: since the FCB1010 doesn't know which stompboxes are actually ON on your MIDI-device, these settings should be the same on both FCB1010 and your MIDI-device for each program. Otherwise you gonna get confused. For the same reason it should be ON or blank (off), never NC!

### Stompbox extended: toggle Expression Pedal A

Let's make things even better: if we select delay (button 10), we want delay-mix (cc3) instead of wah (cc4) on Expression A.

S-10 100 0 30 0 12	27 🗘 🔽 🛛 🗘 🗋 🖉	3 🗘 🗹 4 🗘 🔽 🙏	0 🗘 127 🗘 🗹 📧 14 🗘	0 🗘 127 🗘 n/a
	0 🗘 3 🗘	4 😴 🔽 12 💭	0 🤤 127 🤤 🗹	

On EXP A make both checkboxes green.

Now you change the values on CNT 2:: Val (3=selected) and Alt Val (4=unselected). Those are CC-numbers here and not values!!

## Transmit the patches to the FCB1010

R Ripwe	rx FC	B1010	Editor	- [U:\Axe		
File Edit	MIDI	Tools	Help			
Presets (	Ge	t Patch	Dump	Ctrl+G		
Edit Pres	Sei	nd Patch	Ctrl+T			
Stomp	1000	Select Input Device Select Output Device				