

FL Studio & Behringer BCF2000

Version 2.0, 18.01.2018

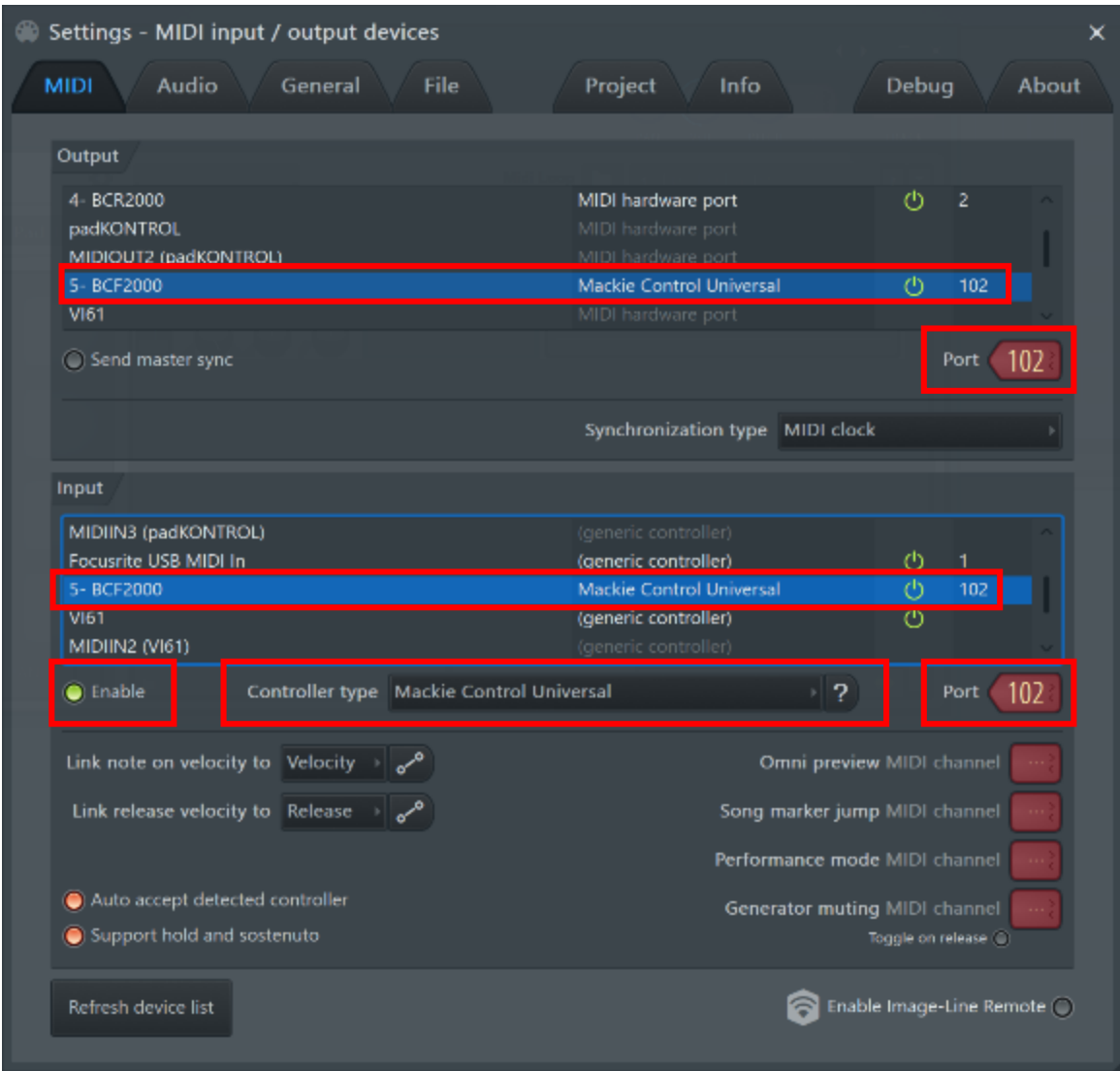
Preparation of BCF2000 for Mixer Mode (Mackie Control Mode)

1. No preparation necessary
2. Start your BCF with following steps:
 - a. BCF is turned off
 - b. Push second switch and hold
 - c. Turn on your BCF
 - d. Mixer Mode is successfull, if Display shows „NC C“
(for switching back to controller mode push first switch while turning on your BCF2000; display shows P- 1)



Preparation of FL Studio for Mixer Mode (Mackie Control Mode)

- 1. Goto MIDI-Settings
- 2. Enable BCF2000
- 3. Choose Controller type “Mackie Control Universal”#
- 4. Choose Port 102 also for Input and Output
- 5. BCF is ready for Mixer mode
 - a. You can control FL Studio Mixer completely bi-directional with your BCF2000
 - b. Controlling of other wheels and faders (e.g. instruments or effects) is not possible



Preparation of BCF2000 for Controller Mode

1. No preparation necessary
2. Start your BCF with following steps:
 - a. BCF is turned off
 - b. Push first switch and hold
 - c. Turn on your BCF
 - d. Controller Mode is successful, if display shows first „BC“ and then „P- 1“
(for switching back to Mackie mode push second switch while turning on your BCF2000)



Preparation of BCF2000 for Controller Mode

1. Download BC Manager for easy configuration of your BCF2000 (<http://mountainutilities.eu/bcmanager>)
2. Use BC Manager for the following steps:
 - a. delete all presets on your BCF2000 (you can surely make a backup first)
 - b. install my preset on your BCF (e.g. „FL Studio“ on P-1; preset is based on Image-Line generic preset for BCF2000)
 - c. Mode is NRPN
 - d. All encoder values are from 0 to 127 (7 bit)
 - e. Encoder Group 1+2: absolute mode*, 1-2 dots LED, default value = 0)
 - f. Encoder Group 3+4: relative mode*, no LED, default value = 0)
 - g. Switches: values from 127 to 0; Toggle Mode On
 - h. Push Encoders: values from 64 to Off; Toggle Mode Off
 - i. Faders: values from 0 to 16383 (14bit) in absolute mode; Motor-sync

* absolute mode = BCF sends an absolute value between 0 and 127 to FL Studio, depending on the position of knob, switch or fader; you can see the position by the LEDs

* relative mode = BCF sends only a change value to FL Studio like „1 step more“ or „1 step less“; usage of LEDs doesn't make any sense

absolute controller for digital knobs, faders, etc - bi-directional!! (Encoder Group 1+2, Switches, Faders)

- Midi-protocol is CC (value range 0 to 127)
- Midi channel is 2 (you can change if you want)

No.	Group/Row	Item	F	M	Name	Comments	Show	Default	LEDs	Resolutions	Type	Ch	Param	Value 1	Value 2	Mode	Custom output
1	Push Encoder Group 1	1	*				+	1	1 or 2 dots	96	CC	2	1	0	127	Absolute	
2	Push Encoder Group 1	2	*				+	1	1 or 2 dots	96	CC	2	2	0	127	Absolute	
3	Push Encoder Group 1	3	*				+	1	1 or 2 dots	96	CC	2	3	0	127	Absolute	
4	Push Encoder Group 1	4	*				+	1	1 or 2 dots	96	CC	2	4	0	127	Absolute	
5	Push Encoder Group 1	5	*				+	1	1 or 2 dots	96	CC	2	5	0	127	Absolute	
6	Push Encoder Group 1	6	*				+	1	1 or 2 dots	96	CC	2	6	0	127	Absolute	
7	Push Encoder Group 1	7	*				+	1	1 or 2 dots	96	CC	2	7	0	127	Absolute	
8	Push Encoder Group 1	8	*				+	1	1 or 2 dots	96	CC	2	8	0	127	Absolute	
9	Push Encoder Group 2	1	*				+	1	1 or 2 dots	96	CC	2	9	0	127	Absolute	
10	Push Encoder Group 2	2	*				+	1	1 or 2 dots	96	CC	2	10	0	127	Absolute	
11	Push Encoder Group 2	3	*				+	1	1 or 2 dots	96	CC	2	11	0	127	Absolute	
12	Push Encoder Group 2	4	*				+	1	1 or 2 dots	96	CC	2	12	0	127	Absolute	
13	Push Encoder Group 2	5	*				+	1	1 or 2 dots	96	CC	2	13	0	127	Absolute	
14	Push Encoder Group 2	6	*				+	1	1 or 2 dots	96	CC	2	14	0	127	Absolute	
15	Push Encoder Group 2	7	*				+	1	1 or 2 dots	96	CC	2	15	0	127	Absolute	
16	Push Encoder Group 2	8	*				+	1	1 or 2 dots	96	CC	2	16	0	127	Absolute	
17	Push Encoder Group 2	1	*						Off	30				0	0		ifc #B0 #E0 #01 ifc #B0 #E1 #01

relative controller for digital knobs, faders, etc. (Encoder Group 3+4)

17	Push Encoder Group 3	1	*				Off	30				0	0		ifp \$B0 \$60 \$01 ifn \$B0 \$61 \$01
18	Push Encoder Group 3	2	*				Off	30				0	0		ifp \$B0 \$60 \$02 ifn \$B0 \$61 \$02
19	Push Encoder Group 3	3	*				Off	30				0	0		ifp \$B0 \$60 \$03 ifn \$B0 \$61 \$03
20	Push Encoder Group 3	4	*				Off	30				0	0		ifp \$B0 \$60 \$04 ifn \$B0 \$61 \$04
21	Push Encoder Group 3	5	*				Off	30				0	0		ifp \$B0 \$60 \$05 ifn \$B0 \$61 \$05
22	Push Encoder Group 3	6	*				Off	30				0	0		ifp \$B0 \$60 \$06 ifn \$B0 \$61 \$06
23	Push Encoder Group 3	7	*				Off	30				0	0		ifp \$B0 \$60 \$07 ifn \$B0 \$61 \$07
24	Push Encoder Group 3	8	*				Off	30				0	0		ifp \$B0 \$60 \$08 ifn \$B0 \$61 \$08
25	Push Encoder Group 4	1	*				Off	30				0	0		ifp \$B3 \$60 \$01 ifn \$B3 \$61 \$01
26	Push Encoder Group 4	2	*				Off	30				0	0		ifp \$B3 \$60 \$02 ifn \$B3 \$61 \$02
27	Push Encoder Group 4	3	*				Off	30				0	0		ifp \$B3 \$60 \$03 ifn \$B3 \$61 \$03
28	Push Encoder Group 4	4	*				Off	30				0	0		ifp \$B3 \$60 \$04 ifn \$B3 \$61 \$04
29	Push Encoder Group 4	5	*				Off	30				0	0		ifp \$B3 \$60 \$05 ifn \$B3 \$61 \$05
30	Push Encoder Group 4	6	*				Off	30				0	0		ifp \$B3 \$60 \$06 ifn \$B3 \$61 \$06
31	Push Encoder Group 4	7	*				Off	30				0	0		ifp \$B3 \$60 \$07 ifn \$B3 \$61 \$07
32	Push Encoder Group 4	8	*				Off	30				0	0		ifp \$B3 \$60 \$08 ifn \$B3 \$61 \$08

No.	Type/Hex	Param/Dec	Binary
1	ifp		
2	\$B3	179	1011-0011
3	\$60	96	0110-0000
4	\$01	1	0000-0001
5	ifn		
6	\$B3	179	1011-0011
7	\$61	97	0110-0001
8	\$01	1	0000-0001

- If value positive
 - Set MIDI channel 3 (you can also use an other channel)
 - And send value 60 (= increase one step*)
 - For controller #1 (Param/Dec) → use number only for one controller
- If value negative
 - Set MIDI channel 3 (you can also use an other channel)
 - And send value 61 (= decrease one step*)
 - For controller #1 (Param/Dec)

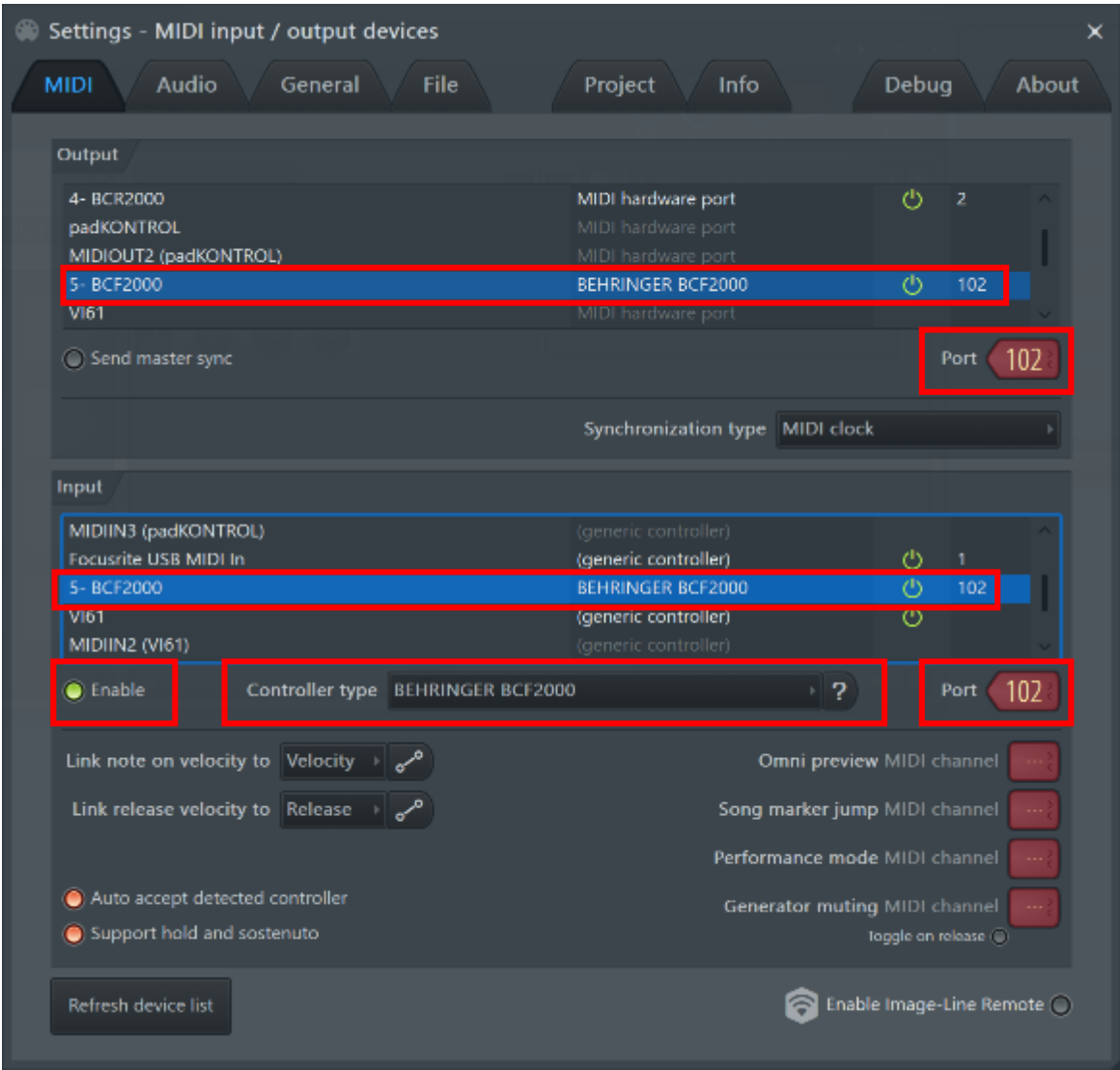
* FL Studio 12 or lower: one step isn't one step from 0 to 127, but about 4 steps;
From FL Studio 20 it works well ☺

Preparation of FL Studio

1. Copy
Dashboard\Behringer_BCF2000.fst
to
C:\Program Files (x86)\Image-Line\FL Studio 12\Data\Patches\Plugin presets\Generators\Dashboard
2. Copy
MidiOut\Behringer_BCF2000.fst
to
C:\Program Files (x86)\Image-Line\FL Studio 12\Data\Patches\Plugin presets\Generators\MIDI Out

Preparation of FL Studio for controller mode

- 1. Go to MIDI-Settings
- 2. Enable BCF2000
- 3. Choose Controller type “(generic controller)”
don’t choose Behringer BCF2000!
- 4. Choose any port also for input and output
(I recommend to use 102 for fast switching between
controller and Mackie Control mode)
- 5. BCF is ready for controller mode



bi-directional absolute controlling (Encoder Group 1+2, Switches and Faders)

1. You can use the absolute and relative controllers like you prefer (for absolute I recommend to use the my Dashboard preset)
2. Use BCF2000 in preset „P-1“
3. Add MidiOut to Channel Rack
4. Load Preset „Behringer_BCF2000.flp“ (turn the knobs to check whether BCR reacts)
5. Change Midi Channel to 2, and port to 102 (even if you choosed this port)
6. Add Dashboard to Channel Rack
7. Load Preset „Behringer_BCF2000.flp“
8. To use fully bi-directional absolute controlling do the following way (next page with pictures)
 - a. Open MidiOut of the BC2000
 - b. RM (Right Mouse) on knob (e.g. 1 = controller #1), „Link to controller...”
 - c. choose „Internal Controller“ → Behringer_BCF2000 – Wheel1 (that’s the first wheel controller of Dashboard)
 - d. Do this for all other knobs (Wheel2, Wheel3, ... Switch1, Switch2, ...)
 - e. Open Dashboard
 - f. RM on knob (e.g. Wheel 1), „Link to controller...”
 - g. Turn the equal wheel on your BCF2000
 - h. Do this for all other knobs (Wheel2, Wheel3, ... Switch1, Switch2, ...)
 - i. Open any instrument or effect you want to use (e.g. Fruity Filter)
 - j. RM on knob, „Link to ctrontroller...”
 - k. choose „Internal Controller“ → change the wheel or switch you want to use, but use each wheel on your BCF only for **one** instrument or effect
9. I recommend to save this as a new template to avoid a lot of work for every new project

„Link to controller...“
→ Internal Controller e.g.
Wheel 1



„Link to controller...“
→ Internal Controller e.g.
Wheel 1



„Link to controller...“
→ turn wheel of BCR



relative controlling (Encoder Group 3+4)

1. To use controlling do the following way (next page with pictures)
 - a. RM (Right Mouse) on knob (e.g. 1 = controller #1), „Link to controller“ or „Override generic controller“
 - b. When you turn your wheel on BCR, the virtual wheel starts from it's current point
 - c. For FL Studio 12 and lower:
 - a. It's not useful for automation, because one step on BCF is 4 steps in FL Studio, but it's very at the beginning of composing for fast trying
 - b. For automation during your arrangement use Encoder group 1 or 2 with absolute controlling

Any questions?

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