

OB-MIDIControl [decal version]

cc#/MIDI channel
Min-Max

114/16 1-3 DEVICE SELECT	115/16 127-127 push encoder to force DEVICE CHANGE	90/16 0-16 MIDI CHANNEL	79/16 0-1 KBD-MODE	77/16 MOD-WHEEL AMT	89/16 1-8 VOICES 1-8
---------------------------------------	--	--------------------------------------	---------------------------------	-------------------------------	-----------------------------------

ENCODER GROUP 4
SYSTEM parameter

108/1 VOICE 1 DETUNE	108/2 VOICE 2 DETUNE	108/3 VOICE 3 DETUNE	108/4 VOICE 4 DETUNE	108/5 VOICE 5 DETUNE	108/6 VOICE 6 DETUNE	108/7 ALL OSC TUNE	108/8 1-6 VOICE DEFEAT 1-6
--------------------------------	--------------------------------	--------------------------------	--------------------------------	--------------------------------	--------------------------------	------------------------------	---

ENCODER GROUP 3
SERVICE parameter

ENCODER GROUP 2

24 OSC 1 FREQ	23 OSC 2 FREQ	11 DETUNE	13 PORTAMENTO	20 PULSE WIDTH	22 PULSE MOD	21 MODULATION	12 LFO RATE
25/3 SAW/PULSE	25/4 SAW/PULSE	26/7 UNISON	25/7 LFO S&H	27/8 NOISE-HI	26/1 OSC 1 PWM	25/6 OSC 1 MOD	25/5 LFO SIN/PULSE
26/5 SYNC	26/6 X-MOD F-ENV	26/4 OSC 2 FULL/HALF	26/3 KBD-TRACK	27/7 NOISE-LO 4-POLE	26/2 OSC 2 PWM	25/1 OSC 2 MOD	25/2 VCF MOD
OSCILLATORS				PWM		MODULATION	

ENCODER GROUP 1
MAIN parameter

ENCODER GROUPS

MAIN	
1	2
SERVICE	SYSTEM
3	4

10 VCF FREQ	18 RESONANCE (reverse value)	19 VCF ADSR	6 ATTACK	8 DECAY	15 SUSTAIN	17 RELEASE
FILTER			FILTER ENVELOPE			
7 ATTACK	14 DECAY	16 SUSTAIN	9 RELEASE	LOUDNESS ENVELOPE		

mLab
OB-MIDIcontrol

85 1-56 PRESET 1..56	Modulation	Pitch	Portamento	ProgramChange	86 1-56 MEMORY 1..56
-----------------------------------	------------	-------	------------	---------------	-----------------------------------

MEMORY CONTROL

PGM change	107
NEXT PROGRAM	Sys-Ex DUMP
87	88
LOAD	SAVE

mLab OB-magicBox II controller number and MIDI channel assignment

<i>Channel messages</i>	<i>These messages depend on the selected RX channel (1...16 or OMNI)</i>
• ProgramChange	0...111 (0...55 = PRESET, 56...111 = USER MEMORY)
• ChannelPressure	0...127 (same as Modulation)
• NoteOn	24...84
• NoteOff	24...84
• Pitch	±2 semitones
• cc 01 Modulation	0...127
• cc 05 Portamento	0...127
• cc 123 AllNotesOff	0

<i>Global controllers on channel 16</i>	<i>These messages must be sent on MIDI channel 16</i>
• cc 77 Amount of Modulation	0...127
• cc 79 Keyboard Mode	0...1
• cc 89 Number of Voices	1...6 OB-Sx, 1...8 OB-X/OB-Xa
• cc 90 RX channel	1...16, 0 = OMNI
• cc 114 DEVICE SELECT	1 = OB-SX, 2 = OB-X, 3 = OB-Xa
• cc 115 DEVICE CHANGE	127

Note! Save your data before performing a DEVICE CHANGE.

A DEVICE CHANGE overwrites the magicBox's internal USER MEMORY with the factory presets.

<i>Global controllers channel independent</i>	<i>These messages are accepted on all MIDI channels</i>
• cc 78 Parameter Feedback Request	(used by OSC e.g. TouchOSC)
• cc 85 preset select	(value = 1...56) read only
• cc 86 USER MEMORY select	(value = 1...56) read/write
• cc 87 LOAD SWITCH	
• cc 88 SAVE SWITCH	
• cc 107 DUMP SWITCH	(USER MEMORY SysEx MIDI DUMP)

Test and service functions

- cc 108/chn 1...6 Voice 1...6 individual OSC 2 DETUNE (UNISON DETUNE) [disables AUTOTUNE]
- cc 108/chn 7 Oscillator Tune Control (synthesizer calibration purpose) [disables AUTOTUNE]
- cc 108/chn 8 Defeat voices 1...6 [only affects notes played on the Oberheim keyboard]

Oberheim Parameter

- cc 06 = VCF_ATK 0...127
- cc 07 = VCA_ATK 0...127
- cc 08 = VCF_DCY 0...127
- cc 09 = VCA_REL 0...127
- cc 10 = VCF_FREQ 0...127
- cc 11 = OSC2_DET 0...127
- cc 12 = LFO_FREQ 0...127
- cc 13 = PORTAMENTO 0...127
- cc 14 = VCA_DCY 0...127
- cc 15 = VCF_SUS 0...127
- cc 16 = VCA_SUS 0...127
- cc 17 = VCF_REL 0...127
- cc 18 = RESONANCE 127...0
- cc 19 = VCF_ADSR 0...127
- cc 20 = PLSE_WDTH 0...127
- cc 21 = MODULATION 0...127
- cc 22 = PW_MOD 0...127
- cc 23 = OSC_2_FRQ 0...127
- cc 24 = OSC_1_FRQ 0...127

SWITCH GROUP 1...2

- cc 25/chn1...6 = SW_GRP1 <64/>63
- cc 26/chn1...7 = SW_GRP2 <64/>63
- cc 27/chn7...8 = SW_GRP3 <64/>63

<i>CC#/Channel</i>	8	7	6	5	4	3	2	1
• cc 25			OSC1_MOD	LFO_WAVE	OSC2_WAVE	OSC1_WAVE	VCF_MOD	OSC2_MOD
• cc 26		UNISON	X-MOD/F-ENV	SYNC	OSC2_HALF	KBD-TRK	OSC2_PWM	OSC1-PWM
• cc 27	NOISE	4-POLE						

cc# points to the switch group, MIDI channel points to the corresponding switch.

PUSH ENCODER Rotary Turn Function

1	2	3	4	5	6	7	8
MIDI Data Type	MIDI TX Channel	Parameter	Value 1	Value 2	Controller MODE	Controller Option	Display Value
PROGRAM CHANGE	1-16	Off, Bank Select MSB	Off, Bank Select LSB	x	x		Value indication: On/Off
CC (Control Change)	1-16	CC-0-127	Min. value: 0-127/16383	Max. value: 0-127/16383	Absolute Absolute (14-Bit) Relative 1 Relative 2 Relative 3 Relative 1 (14-Bit) Relative 2 (14-Bit) Relative 3 (14-Bit)		Value indication: On/Off
NRPN (Non Registered Parameter Number)	1-16	NRPN Parameter Number	Min. value: 0-127/16383	Max. value: 0-127/16383	Absolute Absolute (14-Bit) Relative 1 Relative 2 Relative 3 Relative 1 (14-Bit) Relative 2 (14-Bit) Relative 3 (14-Bit) Inc/Dec		Value indication: On/Off
PITCH BEND	1-16	x	Range 0-127	x	x		Value indication: On/Off
AFTER TOUCH	1-16	Key number 0-127, ALL (All = Channel Aftertouch)	Min. value: 0-127	Max. value: 0-127	x		Value indication: On/Off
GS/XG	1-16	Select GS/XG-Main Control-parameter with clear text indication	Min. value: 0-127	Max. value: 0-127	x		Value indication: On/Off

CONTROLLER OPTION Push Encoder, LED Display :

Off	The LED circle remains off.
1d	(1 digit): Only one LED lights up at a time (standard setting).
1d-	The LED circle operates similar to “1d”, but when the value is 0, no LED lights up.
2d	Turning the encoder clockwise, at first only one LED lights up, and then the next LED lights up while the previous LED goes out.
2d-	Just like “2d”, but when the value is 0, no LED lights up.
Bar	Bar display: when the value is changed, all LEDs light up successively (for volume etc.).
Bar-	Just like bar display, but when the value is 0, no LED lights up.
Sprd	Spread: When the value is 0, the upper middle LED lights up; when the value is increased, the LED circle gradually lights up in both directions (left and right).
Pan	In center position only one LED is on. When increasing the value then the LED bar grows up and vice versa.
Qual	(Quality Q) has the opposite effect from spread: the LED circle lights up gradually when you decrease the value. This setting is used for parametric equalizers ‘Q’.
Cut	Controlling the cutoff frequency of a low-pass filter. When the value is 0, all LEDs light up. The LEDs go out successively as you increase the value.
Damp	When the value is 0, the outer right LED lights up. If the values are increased, the LED circle fans out from right to left until all LEDs light up

GLOBAL SETUP Encoder	press EDIT & STORE together Function	Select	mLab.midisoft.de OB magicBox
1	Operating Mode	U-1 ... U-4, S-1 ... S-4	Operating Mode S-3
2	Global RX Channel	Off, 1...16	Global RX-channel Off
3	Foot switch	Auto / Normal / Inverted	
4	Start-Preset	1 ... 32, Last	
5	Device ID	1 ... 16	Device ID 1
6	SysEx Dump	Single/All	
7	x	x	
8	MIDI Data Interval	(ms)	

How to load a SysEx file into your BCR2000.

1. Check that your BCR2000 has the correct SysEx ID
Hold down the EDIT BUTTON and press STORE.
Use the 5th encoder on the top row to set the ID to number 1
Press EXIT to leave this menu.
2. Send the SysEx file to your BCR2000.
After that the BCR2000 keeps the SysEx file in a buffer.
Before you can use it you must store this buffer in one of the 32 memory locations of the BCR2000.
3. Press the STORE BUTTON once.
The STORE LED flashes continuously.
4. Now use the cursor keys to select the desired PRESET of the BCR2000.
5. Then press STORE again.