OB-MIDIControl [decal version]

cc#/MIDI channel Min-Max





MIDI CHANNEL





KBD-MODE MOD-WHEEL AMT



VOICES 1-8

ENCODER GROUP 4 SYSTEM parameter



VOICE 1 DETUNE

108/2

VOICE 2 DETUNE VOICE 3 DETUNE

108/3

108/4

VOICE 4 DETUNE VOICE 5 DETUNE

108/5

108/6

VOICE 6 DETUNE

108/7

ALL OSC TUNE

108/8 1-6

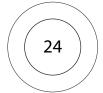
VOICE DEFEAT 1-6

ENCODER GROUP 3 SERVICE parameter

ENCODER GROUP 2

ENCODER GROUP 1

MAIN parameter















25/6



LFO RATE ENCODER GROUPS

OSC 1 FREQ 25/3

SAW/PULSE

26/5

25/4 **SAW/PULSE** **DETUNE** 26/7 **UNISON**

26/4

25/7

LFO S&H

26/3

27/8 **NOISE-HI**

26/1 **OSC 1 PWM**

26/2

PORTAMENTO PULSE WIDTH PULSE MOD MODULATION

OSC 1 MOD

LFO SIN/PULSE 25/1

OSC 2 PWM

OSC 2 MOD

25/2

25/5

VCF MOD

SERVICE 3

MAIN

1

SYSTEM

2

SYNC

X-MOD F-ENV

26/6

OSC 2 FULL/HALF

KBD-TRACK NOISE-LO

4-POLE

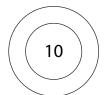
27/7

4

OSCILLATORS

PWM

MODULATION



VCF FREQ



RESONANCE (reverse value)

FILTER

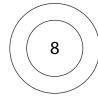


VCF ADSR





ATTACK



DECAY



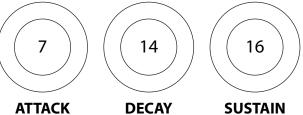
SUSTAIN



RELEASE

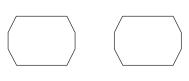


FILTER ENVELOPE





RELEASE



MEMORY CONTROL

107

PGM

LOUDNESS ENVELOPE

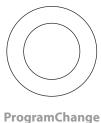


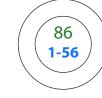
PRESET 1..56



Pitch

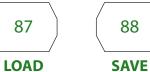












Please ensure that your synthesizer is not in MANUAL mode!

mLab OB-magicBox III MIDI controller and channel assignment Channel messages These messages depend on the selected RX channel (1...16 or OMNI) ProgramChange $0...111 \quad (0...55 = PRESET, 56...111 = USER MEMORY)$ • ChannelPressure 0...127 (same as Modulation) 24...84 • NoteOn 24...84 NoteOff ±2 semitones Pitch • cc 01 Modulation 0...127 0...127 • cc 05 Portamento • cc 123 AllNotesOff Global controllers on channel 16 These messages must be sent on MIDI channel 16 • cc 77 Amount of Modulation 0...127 0...1 • cc 79 Keyboard Mode 1...6 OB-Sx, 1...8 OB-X/OB-Xa • cc 89 Number of Voices • 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 (confirms CC 114) 127 Note! Save your data before performing a DEVICE CHANGE. A DEVICE CHANGE overwrites the magicBox's internal USER MEMORY with the factory presets. Global controllers channel independent These messages are accepted on all MIDI channels • 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
- cc 108/chn 7
- cc 108/chn 8

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

Oberheim Parameter

• cc 06 =	VCF ATK	0127
• cc 07 =	VCA ATK	0127
• cc 08 =	VCF DCY	0127
• cc 09 =	VCA_REL	0127
• cc 10 =	VCF_FREQ	0127
• cc 11 =	OSC2_DET	0127
• cc 12 =	LFO_FREQ	0127
• cc 13 =	PORTAMENTO	0127
• cc 14 =	VCA_DCY	0127
• cc 15 =	VCF_SUS	0127
• cc 16 =	VCA_SUS	0127
• cc 17 =	VCF_REL	0127
• cc 18 =	RESONANCE	1270
• cc 19 =	VCF_ADSR	0127
• cc 20 =	PLSE_WDTH	0127
• cc 21 =	MODULATION	0127
• cc 22 =	PW_MOD	0127
• cc 23 =	OSC_2_FRQ	0127
• cc 24 =	OSC_1_FRQ	0127

SWITCH GROUP 1...2

•	CC	25/chn16 =	SW_GRP1	<64/>63
•	CC	26/chn17 =	SW GRP2	<64/>63
•	CC	27/chn78 =	SW GRP3	<64/>63

CC#/Channel	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.

System Exclusive format

SysEx DUMP

A magicBox SysEx DUMP transfers the entire user memory in a chain of 56 programs. Individual program packages are also accepted on the receiver side.

Since the respective program number is also transferred within a SysEx dump, it is possible to organize the SysEx data offline.

E.g. Combine multiple SysEx files to get the most out of it.

You can split a SysEx dump into individual programs, renumber them and send them back to the magicBox. The order of the incoming programs is irrelevant for the magicBox. Only the program number matters to place it in the right place.

For example, if you send different SysEx programs with the same program number, the last SysEx data then overwrites the previously received ones.

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	х	Range 0-127	х	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	х		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	х		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 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.

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 SET	JP press EDIT & S	press EDIT & STORE together			
Encoder	Function	Select	OB magicBox		
1	Operating Mode	U-1 U-4, S-1 S-4	Operating Mode S-3		
2	Global RX Channel	Off,116	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/Al			
7	х	х			
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.