English

BlackBox Ver 022 MIDI Control Table

For Ver 022 firmware. Use it to configure MIDI footswitches, controllers, or music software. The CC numbers, values, and PC numbers in the tables below are **decimal**; the message examples at the end use hexadecimal.

Channel and Preset Selection

Select the MIDI receive channel **CH 1–16** in the device settings menu, and set your controller to send on the same channel. Selecting **OMNI** receives on all channels.

Presets are selected via **Program Change (PC)**, not CC:

PC Value	Device Preset
0	P01
1	P02
…	…
79	P80

PC 80–127 are invalid. Some controllers display PC as 1–128; rely on the actual data value being sent.

Module On/Off Switches

For CC 0–5, sending value 0 toggles the switch state once; values 1–127 perform no action.
These commands are toggles, not "0 = off, 127 = on".

CC	Module	Value 0	Value 1–127
0	FX	Toggle On/Off	No action
1	AMP	Toggle On/Off	No action
2	MOD	Toggle On/Off	No action
3	DLY	Toggle On/Off	No action
4	REV	Toggle On/Off	No action
5	CAB	Toggle On/Off	No action

When configuring a footswitch, send 0 only once per action; sending 0 again toggles once more.

Tuner and TAP

CC	Function	Value 0	Value 1–127
28	Tuner	Exit when already in tuner screen	Enter tuner screen
40	MOD TAP	No action	Trigger one MOD tap
41	DLY TAP	No action	Trigger one DLY tap
42	MOD + DLY TAP	No action	Trigger a tap on both modules simultaneously

TAP requires valid commands sent repeatedly in time with the beat; the value itself is not a BPM count or a millisecond duration. **Only enabled modules update their parameters**, and the result is limited to the speed/time range of the current effect.

Effect Types and Model Slots

CC	Module	Valid Values	Meaning
48	FX	0–9	Select the FX effect from the table below
49	AMP	0–19	Model slot 1–20
50	MOD	0–6	Select the MOD effect from the table below
51	DLY	0–4	Select the DLY effect from the table below
52	REV	0–5	Select the REV effect from the table below
53	CAB	0–19	Model slot 1–20

Select effects or model slots using the values in the table. For example, to select AMP slot 5, send CC 49 with value 4. A value above the valid maximum selects the last effect/slot.

Switching to another effect or slot loads its default parameters; the module's on/off state is preserved. Re-selecting the current number does not reset parameters. To set parameters, send the type/slot selection first, then the parameter value.

FX: CC 48

Value	Effect
0	Noise Gate++
1	Boost
2	Compress
3	AI Gate MS
4	MW-808
5	MW-GOLD
6	MW-OCD
7	MW-RAT
8	MW-MUFF
9	MW-FACE

MOD, DLY, REV

Value	MOD: CC 50	DLY: CC 51	REV: CC 52
0	Chorus	Analog	Room
1	Phaser	Duck	Hall
2	Tremolo	dTape	Swell
3	Flanger	Dual	Spring
4	Vibrato	Lofi	Shimmer
5	Univibe	—	Cloud
6	Autofilter	—	—

Effect Parameters

Parameter CC values range from **0–127**, mapped to the minimum and maximum of the parameter's adjustment range. Sending **64** corresponds to the center of the range; for parameters on a 0–100 scale, sending 0, 64, 127 corresponds to 0, 50, 100 respectively.

The actual values of parameters such as Time, Speed, and filter frequency depend on the current effect; **do not send milliseconds, Hz, or dB values directly as CC values**. Refer to the device display while adjusting.

In the table, "—" means the current effect has no such parameter, and sending it has no effect. Parameter names follow the device interface.

FX Parameters: CC 54–59

Effect	CC 54	CC 55	CC 56	CC 57	CC 58	CC 59
Noise Gate++	Gate	—	—	—	—	—
Boost	Gate	Gain	—	—	—	—
Compress	Gate	Sustain	Attack	Level	—	—
AI Gate MS	Gate	Bias	—	—	—	—
MW-808	Gate	Gain	Tone	Level	—	—
MW-GOLD	Gate	Gain	Tone	Level	—	—
MW-OCD	Gate	Gain	Tone	LP/HP	Version	Level
MW-RAT	Gate	Gain	Filter	Level	—	—
MW-MUFF	Gate	Sustain	Tone	Level	—	—
MW-FACE	Gate	Fuzz	Level	—	—	—

AMP Parameters: CC 60–65

CC	Parameter
60	Gain; shown as Input for NAM / NAN models
61	Level; shown as Output for NAM / NAN models
62	Bass
63	Middle
64	Treble
65	—

MOD Parameters: CC 66–71

Effect	CC 66	CC 67	CC 68	CC 69	CC 70	CC 71
Chorus	Speed	Depth	Mix	—	—	—
Phaser	Speed	MidCut	Reso	Fb	—	—
Tremolo	Speed	Depth	Level	—	—	—
Flanger	Speed	Depth	Fb	Mix	—	—
Vibrato	Speed	Depth	—	—	—	—
Univibe	Speed	Depth	Mix	—	—	—
Autofilter	Speed	Min	Max	Mix	Fb	—

DLY Parameters: CC 72–77

Effect	CC 72	CC 73	CC 74	CC 75	CC 76	CC 77
Analog	Time	Fb	Mix	Phaser	Pitch	—
Duck	Time	Fb	Mix	Unpack	Speed	Depth
dTape	Time	Fb	Mix	Grit	Speed	Depth
Dual	Time	Fb	Mix	T-Mode	Speed	Depth
Lofi	Time	Fb	Mix	Grit	Speed	Depth

REV Parameters: CC 78–83

Effect	CC 78	CC 79	CC 80	CC 81	CC 82	CC 83
Room	Decay	Mix	HPass	LPass	Depth	—
Hall	Decay	Mix	HPass	LPass	Depth	—
Swell	Decay	Mix	HPass	LPass	RiseT	—
Spring	Decay	Mix	HPass	LPass	Combs	—
Shimmer	Decay	Mix	Tone	Pitch	Amt	—
Cloud	Decay	Mix	HPass	LPass	Diff	—

CAB Parameters: CC 84–89

CC	Parameter
84	Lvl: Volume
85	Lcut: low cut; the two ends correspond to 20–300 Hz
86	Hcut: high cut; the two ends correspond to 5,000–18,000 Hz
87–89	—

Virtual Buttons

These commands simulate physical button presses; the exact behavior depends on the current screen. Values **1–127 mean pressed, 0 means released**. For a short press, send a non-zero value first, then 0; do not send only the press without releasing.

CC	Function
20	Home / Mode button
21	Encoder press
22	Encoder step left; hold to repeat
23	Encoder step right; hold to repeat
24–27	No function yet

Message Examples

The examples below use **MIDI channel 1**; every byte is **hexadecimal**. For channel 2, change `B0` / `C0` to `B1` / `C1`, and so on.

Purpose	Raw MIDI Message	Notes
Toggle AMP on/off	`B0 01 00`	CC 1, value 0
Select AMP slot 5	`B0 31 04`	CC 49, value 4
Set AMP Gain / Input to 50	`B0 3C 40`	CC 60, value 64
Select Analog delay	`B0 33 00`	CC 51, value 0
Set DLY Mix to 50	`B0 4A 40`	CC 74, value 64
Enter tuner	`B0 1C 7F`	CC 28, value 127
Exit tuner	`B0 1C 00`	CC 28, value 0
DLY tap	`B0 29 7F`	Repeat at the target beat; DLY must be enabled
Encoder short press	`B0 15 7F` → `B0 15 00`	Press first, then release
Select P01	`C0 00`	PC 0
Select P80	`C0 4F`	PC 79

Usage Notes

- Unlisted CC numbers have no function. For example, CC 7 is not the master volume on this device, and CC 64 is used for AMP Treble here.
- There is currently no dedicated CC to directly set Master, Input Gain, BT, Loopback, Rec Master, or tail mode, nor a dedicated CC to save presets directly.
- Parameter changes apply to the edit state of the current preset. To keep the changes, use the device's preset save operation.

中文

BlackBox Ver 022 MIDI 控制表

适用于 Ver 022 固件，可用于配置 MIDI 踏板、控制器或音乐软件。下列表格中的 CC 编号、数值和 PC 编号均为**十进制**；文末报文示例使用十六进制。

通道与预设选择

在设备设置菜单中选择 MIDI 接收通道 **CH 1 ~ 16**，并让控制器发送通道与设备一致；选择 **OMNI** 时接收所有通道。

预设通过 **Program Change（PC）** 选择，不使用 CC：

PC 数值	设备预设
0	P01
1	P02
…	…
79	P80

PC 80 ~ 127 无效。有些控制器将 PC 显示为 1 ~ 128，应以实际发送的数据值为准。

模块开关

CC 0 ~ 5 只有发送数值 0 才会切换一次开关状态；数值 1 ~ 127 均不执行操作。 这组命令是“切换”，并非“0 关闭、127 开启”。

CC	控制模块	数值 0	数值 1 ~ 127
0	FX	开 / 关切换	无操作
1	AMP	开 / 关切换	无操作
2	MOD	开 / 关切换	无操作
3	DLY	开 / 关切换	无操作
4	REV	开 / 关切换	无操作
5	CAB	开 / 关切换	无操作

配置踏板时，每次操作只发送一次 0；重复发送 0 会再次切换。

调音器与 TAP

CC	功能	数值 0	数值 1 ~ 127
28	调音器	当前在调音界面时退出	进入调音界面
40	MOD TAP	无操作	触发一次 MOD 打拍
41	DLY TAP	无操作	触发一次 DLY 打拍
42	MOD + DLY TAP	无操作	同时触发两个模块打拍

TAP 需要按节拍连续发送有效命令；数值本身不是 BPM 或毫秒数。**只有已开启的模块会更新参数**，结果受当前效果的速度 / 时间范围限制。

效果型号与模型槽位

CC	模块	有效数值	含义
48	FX	0 ~ 9	选择下表中的 FX 效果
49	AMP	0 ~ 19	模型槽位 1 ~ 20
50	MOD	0 ~ 6	选择下表中的 MOD 效果
51	DLY	0 ~ 4	选择下表中的 DLY 效果
52	REV	0 ~ 5	选择下表中的 REV 效果
53	CAB	0 ~ 19	模型槽位 1 ~ 20

请按表中数值选择效果或模型槽位。例如，选择 AMP 第 5 个槽位时，发送 CC 49、数值 4。发送超过有效上限的数值会选择最后一个效果 / 槽位。

切换至另一个效果或槽位时，会载入其默认参数，模块开关状态保持原状；重复选择当前编号不重置参数。需要指定参数时，先发送型号 / 槽位选择，再发送参数值。

FX：CC 48

数值	效果
0	Noise Gate++
1	Boost
2	Compress
3	AI Gate MS
4	MW-808
5	MW-GOLD
6	MW-OCD
7	MW-RAT
8	MW-MUFF
9	MW-FACE

MOD、DLY、REV

数值	MOD：CC 50	DLY：CC 51	REV：CC 52
0	Chorus	Analog	Room
1	Phaser	Duck	Hall
2	Tremolo	dTape	Swell
3	Flanger	Dual	Spring
4	Vibrato	Lofi	Shimmer
5	Univibe	—	Cloud
6	Autofilter	—	—

效果参数

参数 CC 的数值范围为 **0 ~ 127**，对应参数调节范围的最小值到最大值。发送 **64** 对应调节范围的中间位置；对于使用 0 ~ 100 刻度的参数，发送 0、64、127 分别对应 0、50、100。

Time、Speed、滤波频率等参数的实际数值取决于当前效果，**不能直接把毫秒、Hz 或 dB 数值作为 CC 数值发送**。调节时请参考设备界面的显示。

表中"—"表示当前效果没有该参数，发送后不生效。参数名沿用设备界面。

FX 参数：CC 54～59

效果	CC 54	CC 55	CC 56	CC 57	CC 58	CC 59
Noise Gate++	Gate	—	—	—	—	—
Boost	Gate	Gain	—	—	—	—
Compress	Gate	Sustain	Attack	Level	—	—
AI Gate MS	Gate	Bias	—	—	—	—
MW-808	Gate	Gain	Tone	Level	—	—
MW-GOLD	Gate	Gain	Tone	Level	—	—
MW-OCD	Gate	Gain	Tone	LP/HP	Version	Level
MW-RAT	Gate	Gain	Filter	Level	—	—
MW-MUFF	Gate	Sustain	Tone	Level	—	—
MW-FACE	Gate	Fuzz	Level	—	—	—

AMP 参数：CC 60～65

CC	参数
60	Gain；NAM / NAN 模型显示为 Input
61	Level；NAM / NAN 模型显示为 Output
62	Bass
63	Middle
64	Treble
65	—

MOD 参数：CC 66 ~ 71

效果	CC 66	CC 67	CC 68	CC 69	CC 70	CC 71
Chorus	Speed	Depth	Mix	—	—	—
Phaser	Speed	MidCut	Reso	Fb	—	—
Tremolo	Speed	Depth	Level	—	—	—
Flanger	Speed	Depth	Fb	Mix	—	—
Vibrato	Speed	Depth	—	—	—	—
Univibe	Speed	Depth	Mix	—	—	—
Autofilter	Speed	Min	Max	Mix	Fb	—

DLY 参数：CC 72 ~ 77

效果	CC 72	CC 73	CC 74	CC 75	CC 76	CC 77
Analog	Time	Fb	Mix	Phaser	Pitch	—
Duck	Time	Fb	Mix	Unpack	Speed	Depth
dTape	Time	Fb	Mix	Grit	Speed	Depth
Dual	Time	Fb	Mix	T-Mode	Speed	Depth
Lofi	Time	Fb	Mix	Grit	Speed	Depth

REV 参数：CC 78 ~ 83

效果	CC 78	CC 79	CC 80	CC 81	CC 82	CC 83
Room	Decay	Mix	HPass	LPass	Depth	—
Hall	Decay	Mix	HPass	LPass	Depth	—
Swell	Decay	Mix	HPass	LPass	RiseT	—
Spring	Decay	Mix	HPass	LPass	Combs	—
Shimmer	Decay	Mix	Tone	Pitch	Amt	—
Cloud	Decay	Mix	HPass	LPass	Diff	—

CAB 参数：CC 84 ~ 89

CC	参数
84	Lvl：音量
85	Lcut：低切，参数两端对应 20 ~ 300 Hz
86	Hcut：高切，参数两端对应 5,000 ~ 18,000 Hz
87 ~ 89	—

虚拟按键

这组命令模拟机身操作，具体行为取决于当前界面。数值 **1 ~ 127 表示按下，0 表示松开**；一次短按应先发送非零值，再发送 0，不能只发送按下而不松开。

CC	功能
20	Home / 模式键
21	编码器按键
22	编码器向左一步；持续按住可连续操作
23	编码器向右一步；持续按住可连续操作
24 ~ 27	暂无功能

报文示例

以下使用 **MIDI 通道 1**，每个字节均为**十六进制**。通道 2 将 `B0` / `C0` 改为 `B1` / `C1`，依此类推。

目的	原始 MIDI 报文	说明
切换 AMP 开关	`B0 01 00`	CC 1，数值 0
选择 AMP 第 5 个槽位	`B0 31 04`	CC 49，数值 4
将 AMP Gain / Input 调到 50	`B0 3C 40`	CC 60，数值 64
选择 Analog 延迟	`B0 33 00`	CC 51，数值 0
将 DLY Mix 调到 50	`B0 4A 40`	CC 74，数值 64
进入调音器	`B0 1C 7F`	CC 28，数值 127
退出调音器	`B0 1C 00`	CC 28，数值 0
DLY 打拍	`B0 29 7F`	按目标节拍重复发送，DLY 需开启
编码器短按	`B0 15 7F` → `B0 15 00`	先按下、再松开
选择 P01	`C0 00`	PC 0
选择 P80	`C0 4F`	PC 79

使用说明

- 未列出的 CC 编号无对应功能；例如 CC 7 不是本机的 Master 音量控制，CC 64 在本机用于 AMP Treble。
- 当前没有直接设置 Master、Input Gain、BT、Loopback、Rec Master 或尾音模式的专用 CC，也没有直接保存预设的专用 CC。
- 参数修改作用于当前预设的编辑状态；需要保留修改时，请使用设备的预设保存操作。