

MG-300 Midi implementation guide

The following data has been discovered by using MIDI monitor on a Mac and by using Bome SendSX on a PC.

PC messages:

The MG300 does not respond to program change messages. Use CC#60 to change patches

CC messages:

CC	Range	Target
0	0 -5	Set expression pedal to Wah, EFX, AMP, MOD, DLY or RVB
1	0-1	Set type of compressor
2		Set type of EFX
3		Set type of AMP
4	0-1	Set type of EQ
5	0-1	Set type of NR
6		Set type of MOD
7		Set type of DLY
8		Set type of RVB
9	0 - 25	Speaker type
10	0 – 4	Mic type
11	0 - 99	Comp out
12	0 - 99	Comp sens
17	0 - 99	EFX level
18	0 - 99	EFX gain
19	0 - 99	EFX bass
20	0 - 99	EFX treble
23	0 - 99	Gain knob
24	0 - 99	Presence knob
25	0 - 99	Level knob
26	0 - 99	Bass knob
27	0 - 99	Mid knob
28	0 - 99	Treble knob
29	0 - 99	Eq 100 Hz
30	0 - 99	Eq 220 Hz
31	0 - 99	Eq 500 Hz
32	0 - 99	Eq 1.25 kHz
33	0 - 99	Eq 2.6 kHz
34	0 - 99	Eq 6.4 kHz
35	0 - 99	NR Thres
36	0 - 99	NR Decay
41	0 - 99	MOD knob 1

42	0 - 99	MOD knob 2
43	0 - 99	MOD knob 3
44	0 - 99	MOD knob 4
45	0 - 99	MOD knob 5
47	0 - 99	DLY Time
48	0 - 99	DLY F.back
49	0 - 99	DLY Mix
50	0 – 99	DLY Sub D
51	0 - 7	DLY Sub.D – depending on delay type
52	0 - 1	DLY Pre/post
53		RVB mix
54		RVB knob 2
55		RVB knob 3
56		RVB knob 4
59	0 - 2	Mic position
60	0 - 71	Patch change
61		??
62		Switch wah
64	0 - 99	Master knob
66	1 - 8	Current block selected on screen in edit mode
67	0 – 2	USB routing mode
68	0 – 24	USB REC level
69	0 - 24	USB PLAY level
73		Sent by editor to select patches – does not always work.

Sysex data:

Note: all numbers below are in hex notation.

The MG-300 bounces back sysex messages it cannot identify. Often with a lot of zero's before the 0xF7 command. This causes a lot of unnecessary MIDI traffic.

Identifying the MG-300:

The MG-300 does not respond to a Universal Device Inquiry message (F0 7E 7F 06 01 F7)

Instead the NUX Quicktone editor sends: F0 00 11 22 66 00 00 00 00 F7

MG-300 responds:

```
00 F0 00 11 22 66 00 10 56 30 31 5F 32 30 31 39 31 | "f V01_20191|
10 31 30 36 00 00 00 00 00 00 00 00 00 00 00 00 |106      |
20 00 00 00 00 00 00 00 4E 55 58 5F 4D 47 31 58 F7 |   NUX_MG1X |
```

Requesting common data:

Request by editor: F0 00 11 22 66 00 70 19 00 F7

Response by MG-300: F0 00 11 22 66 00 70 18 00 00 00 32 03 00 0C 0C F7

00 = current patch. Not sure why this value is there twice.

00 = expression pedal activated (01) or not (00)

32 = master volume (00 – 63 hex)

03 = unknown

00 0C 0C = USB routing mode, rec level and play level

Requesting patch data:

F0 00 11 22 66 00 70 07 **00** F7 will request the patch data of patch 0.

The patch number can be **00** to **47** -> total of 66 (decimal) patches.

The response will be F0 00 11 22 66 00 70 **06** followed by the rest of the data

F0 00 11 22 66 00 70 13 00 F7 will request current patch.

The response will be F0 00 11 22 66 00 70 **12** followed by the rest of the data

MG-300 patch data:

00: F0 00 11 22 66 00 70 06 **00 00 00 00 01 00 00 01** | "f p |
10: **00 00** 01 02 02 39 00 00 00 00 00 22 5A 32 00 00 | 9 "Z2 |
20: 00 00 16 23 2D 48 41 41 3C 06 32 32 32 32 32 32 | #-HAA< 222222|
30: 02 14 32 00 00 00 00 24 32 32 14 01 00 00 35 32 | 2 \$22 52|
40: 32 32 07 01 00 13 32 32 32 00 00 00 01 **0D 14 25** |22 222 %|
50: **2D 2B 1A 3E 02 25 1E 1A 27 3E 3E 3E 3E 3E 00** |-+ > % '>>>>> |
60: 10 00 00 00 00 00 00 00 00 00 00 14 00 07 08 F7 | |

00 = the patch number

00 = the assignment of the expression pedal (00 = wah, 01 = efx, 02 = amp, 03 = mod, 04 = dly, 05 = rvb)

00 00 01 00 00 01 00 00 = the type of the effects in the chain: cmp, efx, amp, eq, nr, mod, dly, rvb.

0D 14 25 2D 2B 1A 3E 02 25 1E 1A 27 3E 3E 3E 3E 3E = the patch name.

0D indicates the length of the patch name (13 characters).

The patch name is not using ascii, but the following numbers (decimal):

Number:	Characters:											
0 – 25	A – Z											
26 – 51	a – z											
52 – 61	0 – 9											
62 – 71	Misc:	space	?	!	-	'	:	&	@	,	.	

Tap tempo sends:

F0 00 11 22 66 00 70 17 05 **0C 00** F7 -> tempo 192 = C0 hex

F0 00 11 22 66 00 70 17 05 **09 07** F7 -> tempo 151 = 97 hex

Drum tempo cannot be read or changed using MIDI.

Tuner, looper and drums cannot be activated or edited using MIDI.

Changing effect or amp type on the MG300 produces the following data:

Cmp type: f0 00 11 22 66 00 70 20 0a **01 01** 02 51 14 00 00 00 00 f7 – off = CC 1 - 0
EFX type: f0 00 11 22 66 00 70 20 0a **02 01** 22 5a 32 00 00 00 00 f7 – off = CC 2 - 0
Amp type: f0 00 11 22 66 00 70 **1d** 0a **08 08** 02 16 54 3a 40 41 41 3c 01 f7 – off = CC 3 - 0
EQ type: f0 00 11 22 66 00 70 20 0a **04 01** 06 32 32 32 32 32 32 f7 – off = CC4 - 0
NR type: f0 00 11 22 66 00 70 20 0a **05 01** 02 14 32 00 00 00 00 f7 – off = CC5 - 0
MOD type: f0 00 11 22 66 00 70 20 0a **06 01** 24 32 32 14 01 00 00 f7 – off = CC6 - 0
DLY type: f0 00 11 22 66 00 70 20 0a **07 01** 35 32 32 32 07 01 00 f7 – off = CC7 - 0
Rvb type: f0 00 11 22 66 00 70 20 0a **08 01** 13 32 32 59 00 00 00 f7 – off = CC8 - 0

When the effect type is switched off a CC message is sent.

When setting the effect type a sysex message is sent with all parameters included.

Changing the amp type sends a different command (1d instead of 20).

Patch exchange:

F0 00 11 22 66 00 70 2C **16 17** F7 -> will exchange patch 22 with 23 (decimal)