

SOURCES, EXPRESSORS & TARGETS

| SOURCES | DESCRIPTION                                | TARGETS | DESCRIPTION                                |
|---------|--------------------------------------------|---------|--------------------------------------------|
| NONE    | No source = no modulation                  | NONE    | No target = no modulation                  |
| LFO-1   | Part LFO-1 signal                          | VOLUME  | Preset general volume                      |
| LFO-2   | Part LFO-2 signal                          | PANNING | Preset general panning (left / right)      |
| LFO-F   | Voice LFO filter signal                    | PITCH   | Preset pitch offset                        |
| ENV-F   | Voice filter envelope signal               | BALANCE | Balance between generator & sub-osc        |
| ENV-A   | Voice amplifier envelope signal            | GEN-ROT | Part spectrum rotation parameter           |
| PART    | Part number 1 – 4 (scaled to full range)   | GEN-INV | Part spectrum inversion parameter          |
| NOTE    | MIDI Note number (scaled to full range)    | GEN-FMT | Part spectrum formant parameter            |
| VELO    | MIDI Note velocity (scaled to full range)  | GEN-PTC | Generator pitch offset                     |
| VOICE   | Voice number 1 – 16 (scaled to full range) | GEN-LVL | Generator audio level                      |
| RANDOM  | A random value set at part activation      | SUB-CNT | Sub-oscillator content parameter           |
| NOISE   | A random value changing constantly         | SUB-LO2 | Sub-oscillator LFO 2 amount on content     |
| DC100%  | Constant at maximum positive value         | SUB-PTC | Sub-oscillator pitch offset                |
| DC 66%  | Constant set at 66% of max. value          | SUB-LVL | Sub-oscillator audio level                 |
| DC 50%  | Constant set at 55% of max. value          | NOI-SNH | Noise sample & hold parameter              |
| DC 33%  | Constant set at 33% of max. value          | NOI-COL | Noise color (filter) parameter             |
| DC 25%  | Constant set at 25% of max. value          | NOI-LVL | Noise audio level                          |
|         |                                            | RNG-LVL | Ring modulator level                       |
|         |                                            | FLT-CUT | Multimode filter cutoff                    |
| EXPRS   | DESCRIPTION                                |         |                                            |
| NONE    | No expressor = 100% of modulation          | FLT-RES | Multimode filter resonance                 |
| RAND    | A random value set at part activation      | FLT-EGF | Filter envelope mod. on cutoff             |
| NOIS    | A random value changing constantly         | FLT-LOF | Filter LFO amount on cutoff (filter FM)    |
| LFO1    | Part LFO-1 signal                          | RC-CUT  | RC cell cutoff (extra 1-pole filter)       |
| LFO2    | Part LFO-2 signal                          | SAT-DRV | Saturator drive parameter                  |
| SUST    | MIDI Sustain pedal state / CC#64           | SAT-MIX | Saturator dry/wet parameter                |
| MODW    | MIDI Mod. wheel value / CC#1               | DLY-TIM | Delay time / length parameter              |
| BRTH    | MIDI Breath controller value / CC#2        | DLY-FBK | Delay feedback parameter                   |
| FOOT    | MIDI Foot controller value / CC#4          | DLY-COL | Delay color (filter) parameter             |
| EXPR    | MIDI Expression controller / CC#11         | DLY-LVL | Delay audio level                          |
| PRES    | MIDI Channel pressure                      | EQ1-CNT | 1 <sup>st</sup> Equalizer center frequency |
| VELO    | MIDI Note value                            | EQ1-AMP | 1 <sup>st</sup> Equalizer gain             |
| BEND    | MIDI Note pitch bend (or channel) - MPE    | EQ2-CNT | 2 <sup>nd</sup> Equalizer center frequency |
| AFTR    | MIDI Note aftertouch (or channel) - MPE    | EQ2-AMP | 2 <sup>nd</sup> Equalizer gain             |
| CC74    | MIDI Note CC#74 / cutoff - MPE             |         |                                            |

MIDI CC MAPPING

| CC | PARAMETERS                   | CC | PARAMETERS           | CC  | Parameter                |
|----|------------------------------|----|----------------------|-----|--------------------------|
| 0  | <b>BANK SELECT</b>           | 49 | PRESET_LFO2_RATE     | 88  | PRESET_RC_CUTOFF         |
| 1  | <b>MODULATION WHEEL</b>      | 50 | PRESET_LFO2_AMOUNT   | 89  | PRESET_DRIVE_MODEL       |
| 2  | <b>BREATH CONTROLLER</b>     | 51 | PRESET_LFO2_SHAPE_A  | 90  | PRESET_DRIVE_GAIN        |
| 4  | <b>FOOT CONTROLLER</b>       | 52 | PRESET_LFO2_SHAPE_B  | 91  | PRESET_DRIVE_MIX         |
| 5  | PRESET_GLIDE_TIME            | 53 | PRESET_LFO2_SHAPE_C  | 92  | PRESET_DELAY_TIME        |
| 6  | <i>NRPN MSB DATA</i>         | 54 | PRESET_LFOF_RATE     | 93  | PRESET_DELAY_FEEDBACK    |
| 7  | MULTI_PART_LEVEL             | 55 | PRESET_LFOF_AMOUNT   | 94  | PRESET_DELAY_LEVEL       |
| 10 | MULTI_PART_PAN               | 56 | PRESET_LFOF_SHAPE_A  | 95  | PRESET_DELAY_COLOR       |
| 11 | <b>EXPRESSION CONTROLLER</b> | 57 | PRESET_LFOF_SHAPE_B  | 98  | <i>NRPN LSB PARAM</i>    |
| 12 | MULTI_PART_REVERB            | 58 | PRESET_LFOF_SHAPE_C  | 99  | <i>NRPN MSB PARAM</i>    |
| 13 | PRESET_RING_AUX              | 59 | PRESET_ENVS_SUSTAIN  | 104 | PRESET_ENVS_SUSTAIN      |
| 14 | MULTI_PART_MAIN              | 60 | PRESET_NOISE_ENABLE  | 105 | PRESET_ENVF_DECAY        |
| 16 | PRESET_GEN_SPECTRUM          | 61 | PRESET_NOISE_RATE    | 106 | PRESET_ENVF_AMOUNT       |
| 17 | PRESET_GEN_ROTATION          | 62 | PRESET_NOISE_COLOR   | 107 | PRESET_ENVF_CYCLE        |
| 18 | PRESET_GEN_INVERSION         | 63 | PRESET_DELAY_MODEL   | 108 | PRESET_ENVA_DECAY        |
| 19 | PRESET_GEN_FORMANT           | 64 | <b>DAMPER PEDAL</b>  | 109 | PRESET_ENVA_AMOUNT       |
| 20 | PRESET_SUB_CARRIER           | 70 | PRESET_GEN_WAVELET   | 110 | PRESET_ENVA_CYCLE        |
| 21 | PRESET_SUB_CONTENT           | 71 | PRESET_FILTER_RESO   | 111 | PRESET_EQ1_MODEL         |
| 22 | PRESET_SUB_CONTENT_LFO2      | 72 | PRESET_ENVS_RELEASE  | 112 | PRESET_EQ1_CENTER        |
| 23 | PRESET_SUB_FM_RATE           | 73 | PRESET_ENVS_ATTACK   | 113 | PRESET_EQ1_GAIN          |
| 24 | PRESET_SUB_FM_ENVF           | 74 | PRESET_FILTER_CUTOFF | 114 | PRESET_EQ2_MODEL         |
| 25 | PRESET_SUB_COARSE            | 75 | PRESET_FILTER_ENVF   | 115 | PRESET_EQ2_CENTER        |
| 27 | PRESET_SRC_COARSE            | 76 | PRESET_VIBRATO_RATE  | 116 | PRESET_EQ2_GAIN          |
| 28 | PRESET_SRC_FINE              | 77 | PRESET_VIBRATO_DEPTH | 117 | PRESET_M1_AMOUNT         |
| 29 | PRESET_SRC_BALANCE           | 78 | PRESET_TREMOLO_RATE  | 118 | PRESET_M2_AMOUNT         |
| 30 | PRESET_UNISONO_DETUNE        | 79 | PRESET_TREMOLO_DEPTH | 119 | PRESET_M3_AMOUNT         |
| 31 | PRESET_UNISONO_WIDE          | 80 | PRESET_GEN_LEVEL     | 120 | <b>ALL SOUNDS OFF</b>    |
| 38 | <i>NRPN LSB DATA</i>         | 81 | PRESET_SUB_LEVEL     | 121 | <b>RESET CONTROLLERS</b> |
| 44 | PRESET_LFO1_RATE             | 82 | PRESET_RING_LEVEL    | 123 | <b>ALL NOTES OFF</b>     |
| 45 | PRESET_LFO1_AMOUNT           | 83 | PRESET_NOISE_LEVEL   | 124 | <b>OMNI OFF</b>          |
| 46 | PRESET_LFO1_SHAPE_A          | 85 | PRESET_FILTER_MODEL  | 125 | <b>OMNI ON</b>           |
| 47 | PRESET_LFO1_SHAPE_B          | 86 | PRESET_FILTER_LFOF   | 126 | <b>MONO MODE</b>         |
| 48 | PRESET_LFO1_SHAPE_C          | 87 | PRESET_RC_MODEL      | 127 | <b>POLY MODE</b>         |

WARRANTY AND SUPPORT

Fred's Lab warranties Manatee free of manufacturing defects for a period of 3 years from its purchase date. It covers repair or replacement costs, when the instrument is used in normal, intended conditions. The warranty does not cover typical wear out, damages due to user negligence or modified products. Warranty conditions are fully detailed at: <https://fredslab.net/en/terms.html>

For all support enquiries, you can reach Fred's Lab at: <https://fredslab.net/en/support.html>  
And you will find all product and software updates at: <https://fredslab.net/en/manatee-module.php>

LEGAL MENTIONS

**CE DECLARATION OF CONFORMITY**  
Manatee Synthesizer / EAN: 4170000145219  
Manufacturer: Frédéric Meslin Audiogeräte / Herwarthstraße, 20 / 53115 Bonn, Germany  
This equipment has been independently tested & conforms to: EN 55032:2015 (emission), EN 55035:2017 (immunity), EN 61000-4-2:2009 (ESD), EN 61000-4-3:2006 + A1:2008 + A2:2010 (immunity), EN 61000-4-8:2010 (immunity), EN 61000-6-3 (interference), 2011/65/EU (ROHS 2) and 2012/19/EU (WEEE)

**USA: FCC INFORMATION**  
This equipment has been verified to comply with the limits for a class B computing device, pursuant to FCC Rules. In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. Important: Changes and modifications made to the equipment without the approval of the manufacturer can void your authority to operate this equipment.

**CANADA: INTERFERENCE REGULATION**  
This device does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the radio interference regulation of the Canadian Department of Communications.

Manatee complies with RoHS and REACH regulations    WEEE: DE13166103 | LUCID: DE3290376457863

MANATEE  
QUICKSTART GUIDE  
for Firmware 1.0-31/05/24

