CHANGES IN VERSION 2.0

MATRIX BRUTE
ANALOG SYNTHESIZER

ARTURIA®
YOUR EXPERIENCE • YOUR SOUND
Special Thanks

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Revision date: 22 November 2019
Introduction

Welcome to version 2.0 of the Arturia MatrixBrute!

MatrixBrute rocked the synthesizer world with its introduction in 2016. Never before had a portable analog synthesizer offered so much power and performance in such an affordable package. And now with the release of the version 2.0 firmware, Arturia adds a host of new features to the already impressive feature set of the MatrixBrute.

We developed these features in response to the requests you made. But honestly, there's a lot of overlap between your dreams for this instrument and the fantasies of our own synth-obsessed engineers! We're all in this together.

Here's a brief summary of the new features:

• Compare/preview presets before saving an edited patch
• Four times as many custom mod routes per patch
• Enhanced editing of sequences
  ◦ Rotate sequence events
  ◦ Extend/duplicate a sequence
  ◦ Increased Mod knob functionality
  ◦ More tempo control options
• Custom LFO waveform drawing
• New LFO rate subdivisions (triplet and dotted)
• Edit MIDI Control Center settings from the front panel
• Independent glide per zone in Duo-Split mode

The purpose of this document is to introduce these new features and explain how to use them. For a comprehensive description of all features, both old and new, please download the version 2.0 manual from the Arturia website.

And while you're there, check for firmware updates! We're always honing our craft, and there may be additional features or fixes that you won't want to miss. Of course, if you download the MIDI Control Center application from the website, it will let you know about firmware updates whenever you use it.

We hope you'll be as excited about these new features as we are. They further reveal the wondrous beast that lurks behind the front panel of the MatrixBrute. Let it loose!

Musically yours,

The Arturia team
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1. OVERVIEW OF CHANGES

1.1. Preset compatibility with v1.0

After upgrading a MatrixBrute to v2.0 firmware it is still possible to import presets that were saved to the MIDI Control Center prior to the upgrade. But the opposite is not true, because v2.0 patches have new parameters that a v1.0 unit won’t recognize. ‘Older’ presets are upgraded to v2.0 compatibility when they are imported into a v2.0 unit, and after that the imported bank can’t be exported to a v1.0 unit. The MCC senses the firmware version of the attached MatrixBrute and won’t allow that to happen.

1.2. Preset mode: Compare presets

Use the new Compare mode features to compare an edited preset to its unedited self. The current preset can also be compared with any other preset.

When saving an edited preset, you can audition a target preset location before overwriting it. See the full details about Compare mode here [p.4].

1.3. MOD mode: More custom routes

The number of custom mod routes has been expanded from 4 to 16, through the addition of 3 banks of four routes each (17-20, 21-24, and 25-28). Follow the link to learn more about these new User assignable destinations [p.5].

1.4. SEQ mode: New features

1.4.1. Edit Note, Mod values with Mod knob

The Mod Amount knob can now edit pitch and Mod values within a sequence pattern. See the Edit Note, Mod values with Mod knob section [p.6].

1.4.2. Tempo adjustment

Tempo can now be changed by whole numbers as well as by decimal values. For details, see BPM Adjustment [p.6].

1.4.3. Sequence Rotate

MatrixBrute now has the ability to rotate the contents of a sequence to the left or right, one step at a time. Instructions are found here [p.7].

1.4.4. Sequence extend / duplicate

This feature can extend a pattern by copy/pasting its contents to the end of the existing pattern. To learn how, read this section [p.8].
1.4.5. Disable multiple steps at once

Disable two or more steps, accents, slides, or Mod events instantly. See the Multi-step erase section [p.9].

1.4.6. Step Editing Actions

Many step-editing features were added in version 2.0. For a chart that integrates the original features and the new ones, see the Step editing actions [p.10].

1.5. Custom LFO waveforms

Now you can draw your own LFO waveforms. Imagine the potential for crazy modulations! Learn how here [p.11].

1.6. LFO subdivision

Subdivide the LFO rate into triplet or dotted values. See the LFO subdivision section [p.12].

1.7. MCC Settings mode

All of the MIDI Control Center settings can be changed without a computer attached. Instructions are in the Settings mode section [p.13].

1.8. Glide in Duo-Split mode

Glide can now be enabled independently for the upper and lower sections of the keyboard in Duo-Split mode. When Glide is enabled, Slide events in a pattern are applied only to the lower part. The details are here [p.15].

1.9. Shortcut Charts

We've added a lot of shortcuts to allow quick access to the great new features in version 2.0. For a series of charts that incorporate all of the front-panel shortcuts, see this section [p.16].
2. NEW FEATURES: THE DETAILS

2.1. Preset mode: Compare presets

This section refers to section 5.1.3 ‘Preset Compare’ (p.35) in the MatrixBrute 2.0 manual.

MatrixBrute has 3 memories available when working with a preset:

- The active preset (i.e., the edit buffer)
- The physical panel settings
- The Compare mode memory

Compare mode allows you to view the stored presets while editing the current preset. This is useful in two ways:

- To compare the edited state of the preset to the unedited (stored) version, or to any other preset
- To preview another preset location before overwriting it with an edited preset.

To enable Compare mode, hold the large Preset button and press a matrix button to select a preset.

The front panel behaves differently in Compare mode:

- The Preset button blinks and the SEQ / MOD buttons are dark
- The Sequencer screen displays COMP
- The Preset screen displays the number of the previewed preset
- Select a different preset to preview by pressing its matrix button
- The blue, flashing matrix button indicates which preset is being previewed
- You can make temporary changes to the previewed preset, but they can’t be saved...
  ...because the Save button will only save the preset that was edited before entering Compare mode.

Press Panel or Preset to exit Compare mode. This reloads the previous state of the preset, including any edits that had been made before entering Compare mode.

♪: You cannot enter Settings mode or LFO Draw mode while in Compare mode.
2.2. MOD mode: More custom routes

MOD mode provides 16 user-definable mod routes, divided into four banks of four routes each. Buttons 13-16 are used to access the four banks. Let's start by learning how to assign a parameter to destinations 13 - 16:

![MOD mode buttons](image)

Select the first bank of custom mod routes by pressing button 13 once. Mod routes 13-16 are now available.

Next, hold the [13, 14, 15, or 16] button while moving the desired knob or slider on the front panel. The parameter will appear in the OLED display as shown above. You can then assign a modulation source to this destination and set a modulation amount with the Mod Amount knob.

Use a similar process to access and edit mod routes 17-20, 21-24, and 25-28:

- Press button 14 once to access mod routes 17-20
- Press button 15 once to access mod routes 21-24
- Press button 16 once to access mod routes 25-28

If you've selected mod routes 17-20, for example, then hold the [13, 14, 15, or 16] button while moving the desired parameter control to edit mod routes 17, 18, 19, or 20, respectively.

Here's a chart that may help to visualize the button relationships:

<table>
<thead>
<tr>
<th>Press this once...</th>
<th>...to access routes...</th>
<th>Then hold...</th>
<th>...to edit this route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Button 13</td>
<td>13-16</td>
<td>13 / 14 / 15 / 16</td>
<td>13 / 14 / 15 / 16</td>
</tr>
<tr>
<td>Button 14</td>
<td>17-20</td>
<td>13 / 14 / 15 / 16</td>
<td>17 / 18 / 19 / 20</td>
</tr>
<tr>
<td>Button 15</td>
<td>21-24</td>
<td>13 / 14 / 15 / 16</td>
<td>21 / 22 / 23 / 24</td>
</tr>
<tr>
<td>Button 16</td>
<td>25-28</td>
<td>13 / 14 / 15 / 16</td>
<td>25 / 26 / 27 / 28</td>
</tr>
</tbody>
</table>
2.3. SEQ mode: New features

2.3.1. Edit Note, Mod values with Mod knob

This section refers to section 6.2 'Step editing' (p.48) in the MatrixBrute 2.0 manual

Step editing is beneficial in two ways: it lets you make precision edits to a real-time recording later, and it offers a completely different approach to composition. The basic functions are:

- Enter a musical passage one step at a time, including rests and tied notes
- Use the Mod Amount knob to edit pitch and Mod values
- Use the step/event buttons to select one or more events for editing, or to toggle them on or off
- Hold a step event button, play a key to enter a note and Accent for that step.

Many of the step-editing techniques also work during real-time recording. For a chart that presents this information another way, see Step editing actions [p.10]

2.3.2. BPM adjustment

This section refers to section 5.3.1 'Tempo, rate, and playback controls' (p.41) in the MatrixBrute 2.0 manual

Many of the step editing techniques also work during real-time recording. Version 2.0 provides two methods for changing the tempo. You can still adjust the BPM in decimal values by turning the Rate knob, but now you can also adjust the BPM by whole numbers. To do so, hold the TAP button and turn the Rate knob. Be careful not to do this while the pattern is looping in Record mode, though. In that scenario, notes are erased when TAP is held.
2.3.3. Sequence Rotate

Sometimes a good idea ends up in the middle somewhere when recording a pattern. This feature lets you fix that by shifting the contents of a sequence to the left or right.

It also enables you experiment with a groove by seeing how it sounds with a different step on the downbeat. That could unlock a new idea that wouldn't have occurred to you otherwise.

It's easy to do (and fun to watch).

1. Make sure the Record button is not lit. Rotate only works when SEQ is not in Record mode.
2. Hold TAP and press the Step < or > button. The step LEDs will rotate one step per button press.

This process moves the steps and all of their properties: Gate, Pitch, Accent, Slide, and Seq Mod events. But it only affects the steps inside the sequence length (i.e., the music you hear while the pattern is running). Steps outside of the sequence length are not shifted.

The TAP button is used in Record mode to insert rests or erase notes, so the Rotate feature is only available when Record is Off.
2.3.4. Sequence extend / duplicate

This feature can double the length of a pattern in an instant, while also duplicating the contents. For example, a 16-step pattern becomes a 32-step pattern, with the second half pre-filled by musical data from the first 16 steps. Then make a few edits to create variations in each half of the pattern, and suddenly you’ve made a good idea even better.

**Example 1:** We’ll save the details for the next two examples. For instant gratification, start here. If you’re already in SEQ mode with an existing pattern (32 steps or shorter), simply hold SEQ Length and press the *Step >* button. Here’s what happens:

- The pattern length is doubled
- The Sequence content is duplicated *Note that this overwrites any steps that were outside of the sequence length prior to the operation.*
- The Sequence content is cropped if it exceeds 64 steps.

**Example 2:** Let’s start from the beginning. Select a preset with a quick attack so the results can be heard immediately. Then press SEQ and follow these steps:

1. Initialize the sequence: hold Panel and press SEQ.
2. Hold the SEQ Length button and press A4 to set the length to 4 steps.
3. Press the Record button to enter step record mode.
4. Play only four keys. For this example we’ll use CDEF.
5. Hold SEQ Length and press the *Step >* button. SEQ Length is now 8 steps.
6. Release SEQ Length: Steps 5-8 are lit, which means they contain data.
7. Repeat step 5: SEQ Length is now 16 steps, all of which contain CDEF.
8. Repeat step 5 twice: SEQ Length is now 64 steps (the maximum).
9. Record is still lit. Now press Play and enter different notes with the keyboard.
10. Enable/disable steps, accents, slides, etc., on different steps. Eventually all 64 steps are unique.

**Example 3:** Here’s what happens when the Extend method tries to exceed a pattern length of 64 steps. Let’s say you started with a 60-step pattern:

- Hold SEQ Length and press the *Step >* button
- The pattern is now 64 steps long with the last step set to step 64.
- Result: Steps 61-64 contain the 4 first steps of the initial sequence.

♫: To shorten a sequence, use the normal SEQ Length + matrix button method (not the < arrow).
2.3.5. Multi-step erase

This section refers to section 6.2 'Step editing' (p.48) in the MatrixBrute 2.0 manual

You can disable multiple events at one time by holding the last button of the desired range and then pressing the first button (i.e., hold the right one, press the left one). All of the buttons within that range will be disabled, including the two that were pressed. This method works whether a pattern is looping or not. **But be careful:** When looping a pattern with Record On, holding TAP erases the notes and disables all events until TAP is released.
## 2.3.6. Step Editing Actions

<table>
<thead>
<tr>
<th>Action</th>
<th>Stop (Rec. ON)</th>
<th>Stop (Rec. OFF)</th>
<th>Play (Rec. ON)</th>
<th>Play (Rec. OFF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press a key (Sequencer on)</td>
<td>Set step note + accent + legato (if Legato on)</td>
<td>Start sequencer + transpose</td>
<td>Record real time: note + accent + legato (if Legato on)</td>
<td>Transpose Sequence</td>
</tr>
<tr>
<td>Press Step slot</td>
<td>Trigger step</td>
<td>Toggle on/off</td>
<td>Toggle on/off</td>
<td>Toggle on/off</td>
</tr>
<tr>
<td>Press Accent slot</td>
<td>Toggle on/off</td>
<td>Toggle on/off</td>
<td>Toggle on/off</td>
<td>Toggle on/off</td>
</tr>
<tr>
<td>Press Slide slot</td>
<td>Toggle on/off</td>
<td>Toggle on/off</td>
<td>Toggle on/off</td>
<td>Toggle on/off</td>
</tr>
<tr>
<td>Press MOD slot</td>
<td>Toggle on/off</td>
<td>Toggle on/off</td>
<td>Toggle on/off</td>
<td>Toggle on/off</td>
</tr>
<tr>
<td>Hold two Step slots (L&gt;R) [1]</td>
<td>-NA-</td>
<td>Tie</td>
<td>Tie</td>
<td>Tie</td>
</tr>
<tr>
<td>Hold two Accent slots (L&gt;R)</td>
<td>Enable A&gt;B</td>
<td>Enable A&gt;B</td>
<td>Enable A&gt;B</td>
<td>Enable A&gt;B</td>
</tr>
<tr>
<td>Hold two Slide slots (L&gt;R)</td>
<td>Enable A&gt;B</td>
<td>Enable A&gt;B</td>
<td>Enable A&gt;B</td>
<td>Enable A&gt;B</td>
</tr>
<tr>
<td>Hold two MOD slots (L&gt;R)</td>
<td>Enable A&gt;B</td>
<td>Enable A&gt;B</td>
<td>Enable A&gt;B</td>
<td>Enable A&gt;B</td>
</tr>
<tr>
<td>Hold two Step slots (R&gt;L) [1]</td>
<td>-NA-</td>
<td>Disable A&gt;B</td>
<td>Disable A&gt;B</td>
<td>Disable A&gt;B</td>
</tr>
<tr>
<td>Hold two Accent slots (R&gt;L)</td>
<td>Disable A&gt;B</td>
<td>Disable A&gt;B</td>
<td>Disable A&gt;B</td>
<td>Disable A&gt;B</td>
</tr>
<tr>
<td>Hold two Slide slots (R&gt;L)</td>
<td>Disable A&gt;B</td>
<td>Disable A&gt;B</td>
<td>Disable A&gt;B</td>
<td>Disable A&gt;B</td>
</tr>
<tr>
<td>Hold two MOD slots (R&gt;L)</td>
<td>Disable A&gt;B</td>
<td>Disable A&gt;B</td>
<td>Disable A&gt;B</td>
<td>Disable A&gt;B</td>
</tr>
<tr>
<td>Hold one Step slot + press a key</td>
<td>Enable step + set pitch + accent + trigger step</td>
<td>Enable step + set pitch + accent</td>
<td>-NA-</td>
<td>Same as Stop</td>
</tr>
<tr>
<td>Hold two Step slots + press a key</td>
<td>Add a single step on last step pressed</td>
<td>Tie note from A to B + set pitch + accent for all steps</td>
<td>-NA-</td>
<td>Same as Stop</td>
</tr>
<tr>
<td>Hold one Step slot + turn Mod</td>
<td>Enable step + set pitch</td>
<td>Enable step + set pitch</td>
<td>Same as Stop</td>
<td>Same as Stop</td>
</tr>
</tbody>
</table>

[1] Button hold/press order: L>R = Left to Right; R>L = Right to Left
<table>
<thead>
<tr>
<th>Action</th>
<th>Stop (Rec. ON)</th>
<th>Stop (Rec. OFF)</th>
<th>Play (Rec. ON)</th>
<th>Play (Rec. OFF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold two Step slots (L&gt;R) + turn Mod</td>
<td>Add a single step on last step pressed</td>
<td>Tie note from A to B + set pitch for all steps</td>
<td>Same as Stop</td>
<td>Same as Stop</td>
</tr>
<tr>
<td>Turn MOD knob</td>
<td>Set Seq Mod value of selected step</td>
<td>Show value of selected step (no edit)</td>
<td>Begin Motion record for one loop, then exit Record</td>
<td>-NA-</td>
</tr>
<tr>
<td>Hold one MOD slot + turn Mod</td>
<td>Set value</td>
<td>Set value</td>
<td>-NA-</td>
<td>Set value</td>
</tr>
<tr>
<td>Hold two MOD slots (L&gt;R) + turn Mod</td>
<td>Enable steps + set identical values from A to B</td>
<td>Enable steps + set identical values from A to B</td>
<td>Enable steps + set identical values from A to B</td>
<td>Enable steps + set identical values from A to B</td>
</tr>
</tbody>
</table>

2.4. Custom LFO waveforms

This section refers to section 4.11.2 ‘Draw an LFO waveform’ (p.28) in the MatrixBrute 2.0 manual

Press both Wave Selection arrows at the same time to enter LFO Draw mode. All of the LFO waveform LEDs blink three times, and the Preset screen shows ‘LF1’ or ‘LF2’ depending on which LFO is being edited. The Sequencer display says ‘EDIT’.

The matrix buttons reveal the custom LFO waveform. They are also used to define the waveform. Here’s how it works.

- Columns 1-16 are the steps in the waveform
- Row H is the zero-crossing point
- Rows A-G are positive values
- Rows I-O are negative values
- Row P decides if the change between the previous and current steps is instant or smoothed
- If a step in Row P is blue the transition is instant. If it is red the transition is smoothed.

For a simple example:

1. Start with an initialized patch (Hold Panel, press Preset)
2. Set up a mod route of LFO1 > Pitch (press MOD, then E1, and set an amount with the knob above the matrix)
3. Enter Draw mode for LFO 1 and make a diagonal line from button A1 to button O16. Use two zero values in the middle for now (H8 and I9).

Now look at the matrix: that’s a sawtooth wave, right? Not exactly: slow down the LFO 1 Rate, play a key, and listen. Since the row P buttons are all blue, it’s actually a stair-stepped sawtooth. Press all of the row P buttons, or every other one, or every third, to smooth out different portions of the waveform. After this, try different values in each column to build different waveforms. There are over 2 quadrillion combinations!

You can also create a complementary LFO waveform for LFO2 by holding its Wave Selection arrows and using the matrix buttons as before. Use the Seq-Sync buttons to lock them both to tempo, use the LFO division feature to alter their rhythmic relationship, route them to other destinations in varying amounts, and don’t do the math. Your calculator will melt.

To exit LFO Draw mode, use the Wave Selection arrows or the Preset, SEQ, or MOD buttons.
2.5. LFO subdivision

The LFO rate can be subdivided into triplet or dotted values. To set the LFO time division value, hold Seq-Sync and press one of the three note value buttons in the Sequencer section (the quarter note, triplet, or dotted icons beneath the Link button). This setting is independent from the Sequencer setting, and is visible whenever the Seq-Sync button is held.
2.6. MCC Settings mode

This section refers to section 7.3 'Settings mode' (p.58) in the matrixBrute 2.0 manual

It’s quicker to use the MIDI Control Center to change these settings because you can see them all at once. But you can change them without a computer attached: simply access Settings mode.

To do this, hold PRESET + SEQ + MOD. The Preset display flashes PAR and the Sequencer display flashes the word EDIT. After 2 seconds the Matrix buttons will reveal the settings, which then can be changed using the Matrix buttons.

- The buttons related to the selected parameter are brighter than the others.
- Available values for the selected parameter are lit blue.
- The current value for the selected parameter is purple.
- Available values for all non-selected parameters are a dim blue.
- The current values for all non-selected parameters are a dim purple.
- The parameters in each row are separated by dark buttons, which are inactive.

Here’s what the various rows and lit buttons represent, and which MCC parameters they access:

<table>
<thead>
<tr>
<th>Row</th>
<th>Buttons</th>
<th>Name on Seq screen</th>
<th>MCC parameter</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1-16</td>
<td>Ch.&lt;-</td>
<td>Input MIDI Channel</td>
<td>1-16, Omni, Off [1]</td>
</tr>
<tr>
<td>B</td>
<td>1-16</td>
<td>Ch.Lo</td>
<td>Lower Part MIDI Channel</td>
<td>1-16, Off [2]</td>
</tr>
<tr>
<td>C</td>
<td>1-16</td>
<td>Ch.-&gt;</td>
<td>Output MIDI Channel</td>
<td>1-16 [3]</td>
</tr>
<tr>
<td>D</td>
<td>1-4</td>
<td>Ck.Sr.</td>
<td>MIDI clock source</td>
<td>INT, CLK, USB, MIDI</td>
</tr>
<tr>
<td></td>
<td>6-9</td>
<td>Ck.Rt</td>
<td>Sync Clock In/Out Settings</td>
<td>1pps, Korg, 24ppq, 48ppq</td>
</tr>
<tr>
<td></td>
<td>11-14</td>
<td>M.Out</td>
<td>MIDI out select</td>
<td>Off, MIDI, USB, All</td>
</tr>
<tr>
<td>E</td>
<td>1-2</td>
<td>CC.-&gt;</td>
<td>MIDI param send</td>
<td>Off, On</td>
</tr>
<tr>
<td></td>
<td>4-5</td>
<td>CC.&lt;-</td>
<td>MIDI param receive</td>
<td>Off, On</td>
</tr>
<tr>
<td></td>
<td>7-8</td>
<td>14.Bt</td>
<td>14-bit automation</td>
<td>Off, On</td>
</tr>
<tr>
<td></td>
<td>10-11</td>
<td>Pr.Ch</td>
<td>Program Change receive</td>
<td>Off, On</td>
</tr>
<tr>
<td>F</td>
<td>1-2</td>
<td>SQ.-&gt;</td>
<td>Sequencer/Arp sends notes</td>
<td>Off, On</td>
</tr>
<tr>
<td></td>
<td>4-6</td>
<td>S.TPo</td>
<td>Load Sequence Tempo</td>
<td>Yes, If Paused, No</td>
</tr>
<tr>
<td>G</td>
<td>1-3</td>
<td>Pot.M</td>
<td>Pot mode</td>
<td>JMP, HK, SCL</td>
</tr>
<tr>
<td></td>
<td>5-7</td>
<td>Velo</td>
<td>Velocity curve</td>
<td>LIN, LOG, EXP</td>
</tr>
<tr>
<td>Row</td>
<td>Buttons</td>
<td>Name on Seq screen</td>
<td>MCC parameter</td>
<td>Settings</td>
</tr>
<tr>
<td>-----</td>
<td>---------</td>
<td>--------------------</td>
<td>-------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>9-13</td>
<td>P. Sen</td>
<td>Pressure Sensitivity</td>
<td>0, 25, 50, 75, or 100%</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>1-2</td>
<td>Exp.1</td>
<td>Pedal 1 polarity</td>
<td>STD, REV</td>
</tr>
<tr>
<td>4-5</td>
<td>Exp.2</td>
<td>Pedal 2 polarity</td>
<td>STD, REV</td>
<td></td>
</tr>
<tr>
<td>7-8</td>
<td>Sust</td>
<td>Footswitch polarity</td>
<td>STD, REV</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>1-7</td>
<td>OV.O1</td>
<td>VCO1 Pitch OV MIDI Note</td>
<td>C-2, C-1...C3, C4 [4]</td>
</tr>
<tr>
<td>J</td>
<td>1-7</td>
<td>OV.O2</td>
<td>VCO2 Pitch OV MIDI Note</td>
<td>C-2, C-1...C3, C4 [4]</td>
</tr>
<tr>
<td>K</td>
<td>1-2</td>
<td>Glid</td>
<td>Portamento mode</td>
<td>Time, Rate</td>
</tr>
<tr>
<td>4-8</td>
<td>PB.DZ</td>
<td>Pitchwheel Dead Zone</td>
<td>O, 25, 50, 75, or 100%</td>
<td></td>
</tr>
<tr>
<td>L-O</td>
<td>(dark)</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>LocI</td>
<td>Local control</td>
<td>1-2 (On/Off)</td>
<td></td>
</tr>
</tbody>
</table>

[1] Hold one button and press another in the same row to select Omni (all pink) or Off (all blue).

[2] Hold one button and press another in the same row to select Off (all blue).


[4] Use the Preset < and > arrows to select intermediate note values.

All parameter descriptions are listed in chapter 7.2. MIDI Control Center settings in the MatrixBrute 2.0 manual.

Here’s how to use the buttons:

- The **Sequencer** < and > arrows cycle through the MCC parameters
- The **Preset** < and > arrows edit the value of the selected parameter
- The **Preset display** shows the value of the selected parameter
- The **Sequencer display** shows the selected parameter
- If you know what you want, press the appropriate Matrix button to select the parameter and set its value.

To exit Settings mode, press one of the three large mode buttons (Preset, SEQ, MOD). These settings will be saved and recalled when the MatrixBrute is turned off and back on.
2.7. Glide in Duo-Split mode

This section refers to section 4.8.1.1 "Glide and Duo-Split mode" (p.23) in the MatrixBrute 2.0 manual

When the MatrixBrute is in Duo-Split mode, Glide can be enabled independently for the upper and lower sections of the keyboard. (Note that the Glide time is not independent for the two parts; this value is shared.) Here's how it works.

The Glide on/off button applies to the upper part by default. To toggle Glide for the lower part, hold the Mode button in the Voice section and press the Glide on/off button. The Glide button LED shows the glide status of the lower part when the Mode button is held, and shows the glide status of the upper part when the Mode button is not being held. (Be sure to hold the button for about a second; holding it for less than 700 ms will toggle the Voice Mode.)

This feature is tons of fun with Duo-Split patches that have sequencer patterns! The lower part will glide whenever a Slide event happens, as long as Glide has been enabled for the lower part. But remember: the effect may not be audible if the Glide time is too fast.
2.8. Shortcut / Combination Charts

Here are some charts that summarize the MatrixBrute shortcuts / button combinations:

### 2.8.1. Utility shortcuts

<table>
<thead>
<tr>
<th>Function</th>
<th>Button press combinations</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter Settings mode</td>
<td>Press Preset + SEQ + MOD</td>
<td>Opens the settings editing menu</td>
</tr>
<tr>
<td>Tune oscillators</td>
<td>Hold Panel + press Kbd Track</td>
<td>Locks the synth and initializes oscillator tuning</td>
</tr>
<tr>
<td>Reset keyboard octave</td>
<td>Press Octave &lt; + &gt;</td>
<td>Reset keyboard octave to default</td>
</tr>
</tbody>
</table>

### 2.8.2. Reset commands

<table>
<thead>
<tr>
<th>Function</th>
<th>Button press combinations</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reset Preset</td>
<td>Hold Panel + press Preset button</td>
<td>Resets Init state (Simple sawtooth)</td>
</tr>
<tr>
<td>Reset Sequence</td>
<td>Hold Panel + press SEQ button</td>
<td>Resets the sequence to a blank pattern</td>
</tr>
<tr>
<td>Reset Modulations</td>
<td>Hold Panel + press MOD button</td>
<td>Resets the current preset modulation assignments + amounts</td>
</tr>
<tr>
<td>Reset Macros</td>
<td>Hold Panel + turn Macro</td>
<td>Resets the Macro value</td>
</tr>
<tr>
<td>Reset Master Cutoff</td>
<td>Hold Panel + turn Master Cutoff</td>
<td>Reset the Master Cutoff value</td>
</tr>
<tr>
<td>Reset Mod Amt</td>
<td>Hold Panel + turn Mod Amount</td>
<td>Reset the Mod Amount value</td>
</tr>
</tbody>
</table>

### 2.8.3. Custom Mod Destination commands

<table>
<thead>
<tr>
<th>Function</th>
<th>Button press combinations</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change modulation destination page</td>
<td>Single press on a Custom modulation destination button</td>
<td>Selects the corresponding modulation destination page</td>
</tr>
<tr>
<td>Assign Custom Modulation destination</td>
<td>Hold Mod Column button + tweak destination control</td>
<td>Assign a modulation column to a custom destination</td>
</tr>
<tr>
<td>Assign a modulation amount</td>
<td>Hold Mod Column button + press a modulation slot</td>
<td>Lets you assign a mod amount as a custom modulation destination</td>
</tr>
<tr>
<td>Change page while assigning a custom modulation destination</td>
<td>Hold Mod Column button + press another Column button</td>
<td>Lets you change page to reach custom mod amount located on other pages</td>
</tr>
</tbody>
</table>
### 2.8.4. Compare commands

<table>
<thead>
<tr>
<th>Function</th>
<th>Button press combinations</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compare a preset</td>
<td>Hold Preset + press a preset slot button</td>
<td>Enables compare mode and loads preset in the compare memory</td>
</tr>
<tr>
<td>Show control offset</td>
<td>Hold Preset + turn knob or slider</td>
<td>Shows offset between preset value and current position value of control</td>
</tr>
</tbody>
</table>

### 2.8.5. LFO shortcuts

<table>
<thead>
<tr>
<th>Function</th>
<th>Button press combinations</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LFO Custom Waveform Editing</td>
<td>Press LFO &lt; &gt;</td>
<td>Enables the LFO custom waveform editing mode</td>
</tr>
<tr>
<td>Change LFO time division</td>
<td>Hold LFO Seq-Sync + press Quarter, Triplet or Dotted</td>
<td>Changes the LFO time division to standard, triplet or dotted</td>
</tr>
</tbody>
</table>

### 2.8.6. Duo-Split Mode shortcuts

<table>
<thead>
<tr>
<th>Function</th>
<th>Button press combinations</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set Duo-Split note</td>
<td>Hold Voice Mode + press key</td>
<td>Sets the split note between lower and upper part</td>
</tr>
<tr>
<td>Set lower part octave</td>
<td>Hold Voice Mode + press Octave buttons</td>
<td>Adjusts the lower part keyboard range</td>
</tr>
<tr>
<td>Enable lower part glide</td>
<td>Hold Voice Mode + press Glide button</td>
<td>Toggles Glide On/Off for the lower part</td>
</tr>
</tbody>
</table>
## 2.8.7. Sequencer commands

<table>
<thead>
<tr>
<th>Function</th>
<th>Button press combinations</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Sequence length</td>
<td>Hold SEQ Length button, press a Step button</td>
<td>Sets the length of the sequence</td>
</tr>
<tr>
<td>Rotate Sequence</td>
<td>Hold TAP + press Step &lt; or &gt;</td>
<td>Rotates the contents of a sequence between the first and the last step</td>
</tr>
<tr>
<td>Extend &amp; Duplicate SEQ content</td>
<td>Hold SEQ Length + press Step &gt;</td>
<td>Sequence length is doubled and content is duplicated</td>
</tr>
<tr>
<td>Adjust BPM (Whole numbers only)</td>
<td>Hold TAP + turn Rate</td>
<td>Increments / decrements BPM by whole numbers only</td>
</tr>
<tr>
<td>Edit a Step Pitch value (with keys)</td>
<td>Hold Seq Step + press a key</td>
<td>Modifies the step note</td>
</tr>
<tr>
<td>Edit a Step Pitch value (with Mod Amt knob)</td>
<td>Hold Seq Step + turn Mod Amt knob</td>
<td>Modifies the step note</td>
</tr>
<tr>
<td>Add a tied note / Tie steps</td>
<td>Hold two step buttons</td>
<td>Add a tied note between the two held steps</td>
</tr>
<tr>
<td>Add tied note + Set pitch</td>
<td>Hold two step buttons + press a key</td>
<td>Adds a tied note + sets pitch value with a key press</td>
</tr>
<tr>
<td>Add tied note + Set pitch</td>
<td>Hold two step buttons + turn Mod Amt knob</td>
<td>Adds a tied note + sets pitch value by browsing notes with the Mod Amt knob</td>
</tr>
<tr>
<td>Edit Seq step MOD value</td>
<td>Hold Seq Mod step + turn Mod Amt knob</td>
<td>Modifies the step Mod Amt value</td>
</tr>
<tr>
<td>Disable multiple steps</td>
<td>Hold two Steps in the same row: first the right step, then the left step</td>
<td>Disables all the steps between the two held steps, including the held steps</td>
</tr>
</tbody>
</table>

## 2.8.8. Matrix Arpeggiator commands

<table>
<thead>
<tr>
<th>Function</th>
<th>Button press combinations</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable Matrix Arpeggiator</td>
<td>Press Sequencer + Arpeggiator</td>
<td>Enables Matrix Arpeggiator mode</td>
</tr>
<tr>
<td>Enter lower approach</td>
<td>Hold Step &lt; + Matrix button</td>
<td>Set the note one half step below the defined note</td>
</tr>
<tr>
<td>Enter upper approach</td>
<td>Hold Step &gt; + Matrix button</td>
<td>Set the note one half step above the defined note</td>
</tr>
</tbody>
</table>