

USER'S MANUAL

MINIBRUTE SE

ANALOG SYNTHESIZER

MiniBrute SE Connection software editor 1.0.3

1st edition: May 2014



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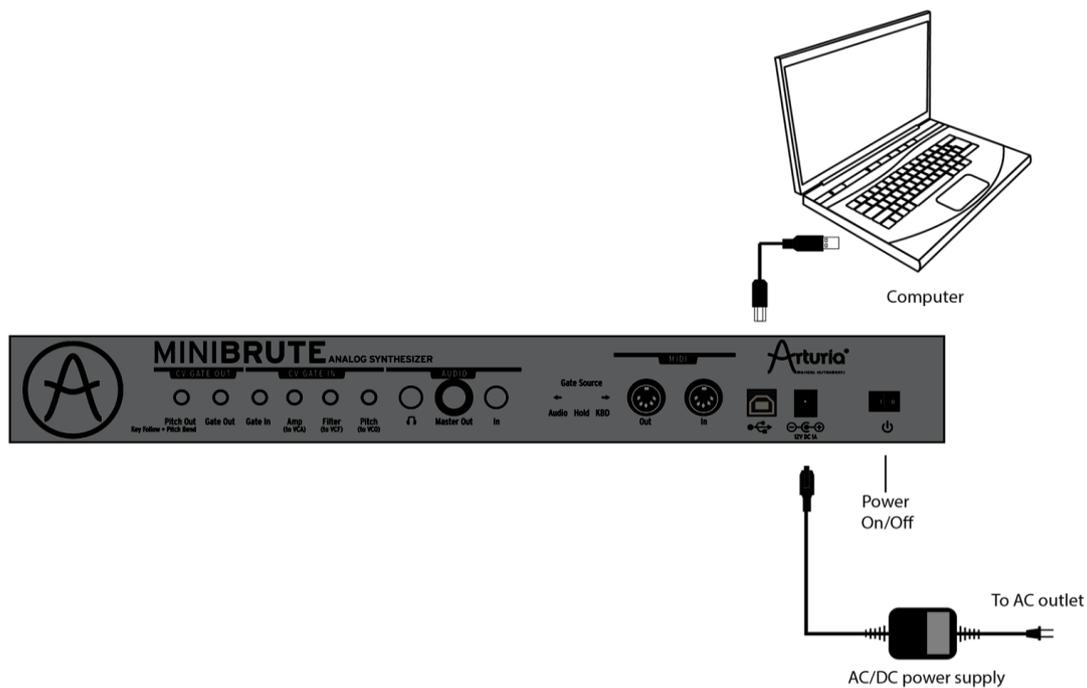
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1 INSTALLATION

1.1 HARDWARE

Connect the MiniBrute SE synthesizer to your computer using a standard USB cable, then power up:



1.2 SOFTWARE

The MiniBrute Connection software editor is freely available from the Arturia website :

<http://www.arturia.com/evolution/en/products/MiniBruteSE/resources.html>

Simply extract the archive, select the appropriate folder, depending on your computer operating system:

- "OSX" for Mac OS X
- "Win" for Windows

The software does not require any installation on your system, the program can be run directly from its extracted folder. If you move the application, make sure it is always accompanied with the *mbf* firmware file.

The MiniBrute Connection software editor offers two main features, described in the following pages:

- the **general configuration** of the instrument (see chapter 2)
- the **firmware update** of the instrument (see chapter 3)

You can switch between those two main features through the tool bar:



 At first launch, the software may detect an older firmware version on your synthesizer, and suggest to update it. It is highly recommended to follow this suggestion, i.e. to run the firmware update process until completion. This is basically the same process as fully described in chapter 3, but it is launched automatically.

2 GENERAL CONFIGURATION

At launch, the software automatically loads the settings stored on your MiniBrute SE.



🔑 When changing a parameter, the settings are automatically sent to the synthesizer and stored in its non-volatile memory. No need for saving or reboot, the new settings apply instantaneously!

2.1 KEYBOARD PARAMETERS



2.1.1 Audio Gate Threshold

This section allows you to select the Audio Gate Threshold, i.e. the audio level from which the envelopes will be triggered. Three levels, based on the most common audio levels, are available: **low**, **medium**, or **high**. Select the level that suits your needs by clicking the toggle switch.

2.1.2 LFO Key Retrigger

This parameter sets the trigger mode of the LFO, and offers 2 settings:

- **On:** the LFO restarts each time a key is pressed.
- **Off:** the LFO is running freely, no matter if a key is pressed or not.

2.2 SEQUENCER CONTROL



2.2.1 Play

The sequencer can play using two different playing methods;

Note On mode and **HOLD** mode.

- **Note On** mode will start the sequencer any time you play a note on the keyboard.
- **Hold** mode will start playing the sequencer immediately when the PLAY mode is set to PLAY with the switch on the front panel.

2.2.2 Next Sequence

The Next Sequence function will determine how sequences change from one to another. The options are Instant and End of Seq.

- **End**– The sequencer will wait until the last note of the current sequence before changing to the next sequence.
- **Instant Reset** – Instant Reset mode will force the sequence to change immediately and also reset the sequence to the first note.
- **Instant Continuous** – Instant Continuous will continue to the following step of next sequence. If you have seq 1 playing and you switch the Pattern knob to seq 2, the next note clock will start playing pattern 2 as seen below.

Pattern 1

Pattern 2

Pattern knob is changed here

Resultant notes that will be played at output

Pattern 1 notes

2

2.2.3 Sync

The Sync function determines how the Minibrute SE will react when connected to an external clock.

- **Int** – When set to Internal, the sequencer will play at the tempo defined by the Tempo knob.
- **Ext** – When set to External, the sequencer will only play when an external MIDI clock is transmitted to the Minibrute SE.
- **Auto** – When set to Auto, the sequencer will follow the external MIDI clock when there is one. If there is none, it will jump back to the tempo defined by the Tempo knob.

2.2.4 Step

The Step function determines the resolution at which the sequencer will play. It can play either 1/16th, 1/8th or 1/4th notes.

2.3 MIDI CHANNEL SELECT



This section allows you to independently set the MIDI input and output channels.

2.3.1 Transmit Channel

This parameter sets the outgoing MIDI channel, i.e. the channel the instrument will transmit messages onto.

This parameter is useful when the MiniBrute SE controls external devices.

Available channels are **1** to **16**.

Select the appropriate MIDI channel by clicking the rotary potentiometer: it will increment step after step until the desired value.

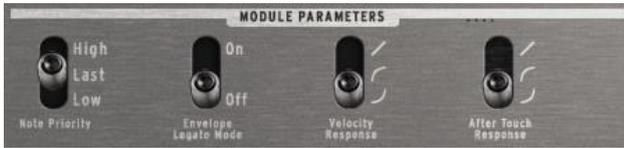
2.3.2 Receive Channel

This parameter sets the incoming MIDI channel, i.e. the channel the instrument will respond to.

This parameter is useful when the MiniBrute SE is being controlled by external devices.

Available channels are **1** to **16**, and **All** which allows MiniBrute SE to respond whatever the channel.

2.4 MODULE PARAMETERS



This section allows the configuration of various modules parameters such as LFO triggering, envelope's legato mode or arpeggiator's notes sorting order.

2.4.1 Note Priority

This parameter sets the play mode when more than one key is pressed:

- **High:** the highest note (pitch sorted) will be played.
- **Last:** the last note (time sorted) will be played.
- **Low:** the lowest note (pitch sorted) will be played.

2.4.2 Envelope Legato Mode

This parameter enables or disables the legato mode:

- **On:** if a new note is played while the preceding one is still active, the envelopes will not be triggered again.
- **Off:** the envelopes are triggered each time a key is pressed.

 When the legato mode is engaged, make sure to set the keyboard **Note Priority** accordingly. (see 2.4.1, page 10)

2.4.3 Velocity Response

This parameter sets the velocity curve of the keyboard.

Three settings are available:

- : the keyboard sends **linear** values, i.e. low values will be sent when the keyboard is played slowly, and high values when played fast.
- : the keyboard sends **logarithmic** values, i.e. high values will be reached even when the keyboard is played slowly.
- : the keyboard sends **exponential** values, i.e. the highest values will be reached only when the keyboard is played fast.

 The velocity does not affect any of the MiniBrite sounds or modulations, this setting only affects the velocity data that MiniBrite sends to its USB/MIDI outputs.

2.4.4 Aftertouch Response

This parameter sets the aftertouch curve of the keyboard. Three settings are available:

- : the keyboard sends **linear** values, i.e. low values will be sent when the pressure on the keyboard is gentle, and high values, when pressed hard.
- : the keyboard sends **logarithmic** values, i.e. high values will be reached even when the pressure on the keyboard is gentle.
- : the keyboard sends **exponential** values, i.e. the highest values will be reached only when the pressure on the keyboard is strong.



When engaged on the MiniBrute SE frontpanel, the aftertouch can modulate the filter's **Cutoff** frequency or the **Vibrato**. The aftertouch values are also sent through MIDI to control external devices.

3 FIRMWARE UPDATE

3.1 FIRMWARE VERSION



Version number of the firmware embedded in your MiniBrute synthesizer.

3.2 CHECK UPDATE



Click this button to open a web browser which will guide you directly to the latest version available. If the version on the Internet is more recent than the one shown previously, close the MiniBrute Connection application, download the new update, extract it and install this new version.

3.3 UPDATE FIRMWARE



Click this button to manually update your firmware to the version included in the application.

The update process takes a few seconds only, the octave LEDs will display activity to let you know it is updating. Make sure not to disconnect your unit before process completion!

Once completed, first reboot MiniBrute SE, then click OK:



3.4 TROUBLESHOOTING

3.4.1 Connection cannot be established

If you did not reboot before clicking "OK", the unit might not be seen as connected anymore. This can be fixed easily:

1. Close the MiniBrute Connection software editor.
2. Reboot your instrument.
3. Launch the MiniBrute Connection software editor and try again.

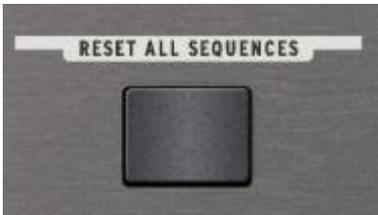
3.4.2 Update has been interrupted

If something went wrong during the firmware update process (computer crash, unplugged USB cable, zombie attack, etc.), there is still a possibility to restore the instrument:

1. Close the MiniBrute Connection software.
2. Reboot the instrument while pressing down the octave Down and Up buttons: all octave LEDs should be lit.
3. Launch the MiniBrute Connection software: you will be prompted for the automatic firmware update. Just cancel, it won't work.
4. Enter into the **Firmware Update** view, and run the manual update.
5. Reboot the instrument, then click OK. Your MiniBrute SE is now fully restored and updated.

4 SEQUENCES

4.1 RESET ALL SEQUENCES



This will reset all the sequences to the factory default sequences.
WARNING: THIS WILL ERASE ALL YOUR INTERNAL SEQUENCES! There is no way to get them back!

4.2 LOAD SEQUENCES



Load sequences allows you to send sequence files from your computer back into the MiniBrute SE. When you SAVE SEQUENCES it will create a file with the extension .mbseq

You can then load this file and send it to your MiniBrute SE. This will write over your internal sequences so make sure you save anything you don't want to lose before loading a different bank in.

4.3 SAVE SEQUENCES



Once you have made some sequences, you might want to save them for later use or to be able to send them to your computer as MIDI files that can be used in other software apps. Clicking on Save Sequences will open a dialog that allows you to choose the location of the files you will save. Once you have named the file and chosen the location you will see the following menu option:



Here you can choose to just create the .mbseq file, that can be loaded back into the MiniBrute SE, or also create a separate .MID file for each sequence. These .MID files are standard MIDI files that can be loaded into your favorite DAW application for use with other devices or plug-ins.

4.4 .MBSEQ FILE

The .mbseq file is a simple text file that you can edit using a text editor.
It is very easy to create your own sequences or edit them.

Data Format:

```
1:60 60 60 60 60 60 60 60 60 60 60 60 60 60 60
2:60 60 60 48 60 60 60 72 60 60 60 48 60 60 72 48
3:48 60 48 60 48 60 63 51 48 60 48 60 63 51 67 55 48 60 48 60 48 60 63 51 48 60 48 60 63 51 67 61
4:60 60 60 60 60 60 57 59 60 60 60 59 60 60 60 60 60 62 59 60 62 64 67 69
5:48 60 72 70 48 67 60 55 48 x 65 72 48 62 72 62 51 58 63 72 51 70 63 58 51 x 62 72 51 72 62 64
6:48 x x 60 48 x 60 x 60 x x 72 60 x 60 x 48 x x 60 48 x 60 x 65 x x
7:60 72 48 60 60 x x 48 60 72 x 60 60 x x 73 48 72 60 61 60 x 72 84 72 48 79 82 48 77 81 70
8:48 48 x x 72 60 48 48 x x 48 x 72 x 82 x 48 48 x x 72 60 48 48 x x 48 x 72 x 75 x 48 48 x x 72 49 48
```

The data in the text file is simple. The first character in a line is the sequence number followed by a :

Then there are a series of MIDI Note numbers that are separated by a SPACE.

At the end of the line is a RETURN

To enter a rest, just type an 'x'.

Middle C with the octave set to 0 = MIDI note 60 on the MiniBrute SE.

5 CHANGING PARAMETERS VIA MIDI CCS

The MiniBrute SE allows you simple access to all the parameters found in the editor via easy to use MIDI CCs. When parameters are changed using CCs, changes will be lost after a restart. To write changes to internal memory you have to use the editor.

Parameter MIDI CC Value

Parameter	MIDI CC	Value
Receive Channel	102	1 to 16, 17=All
Send Channel	103	1 to 16
Seq Retrigger	104	0 to 41 = Reset 42 to 83 = Legato 84 to 127 = None
Seq Play Mode	105	0 to 63 = Hold 64 to 127 = Note On
Next Seq Mode	106	0 to 41 = End 42 to 83 = Instant Reset 84 to 127 = Instant Continuous
Seq Step Size	107	0 to 29 = ¼ 30 to 59 = 1/8 60 to 89 = 1/16 90 to 127 = 1/32
Sync Source	108	0 to 41 = Auto 42 to 83 = Int 84 to 127 = Ext
Env Legato Mode	109	0 to 63 = Off 64 to 127 = On
LFO Retrigger Mode	110	0 to 63 = Off 64 to 127 = On
Note Priority	111	0 to 41 = Last 42 to 83 = Low 84 to 127 = High
Velocity Curve	112	0 to 41 = Lin 42 to 83 = Log 84 to 127 = Anti Log
Gate Length	113	0 to 41 = Short 42 to 83 = Med 84 to 127 = Long
Seq Step/Gate Mode	114	0 to 63 = Clk 64 to 127 = Gate/Tap
Audio In Threshold	115	0 to 41 = Low 42 to 83 = Mid 84 to 127 = High
Aftertouch Curve	116	0 to 41 = Exponential 42 to 82 = Logarithmic 83 to 127 = Linear
Local ON/OFF	122	0 = turn off ; 127 = turn on

6 LEGAL NOTES

6.1 NO LIABILITY FOR CONSEQUENTIAL DAMAGES

Neither ARTURIA nor anyone else involved in the creation, production, or delivery of this product shall be liable for any direct, indirect, consequential, or incidental damages arising out of the use of, or inability to use this product (including without limitation, damages for loss of business profits, business interruption, loss of business information and the like) even if ARTURIA was previously advised of the possibility of such damages. Some states do not allow limitations on the length of an implied warranty or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

6.2 FCC INFORMATION (USA)

DO NOT MODIFY THE UNIT! This product, when installed as indicate in the instructions contained in this manual, meets FCC requirement. Modifications not expressly approved by ARTURIA may avoid your authority, granted by the FCC, to use the product.

IMPORTANT: When connecting this product to accessories and/or another product, use only high quality shielded cables. Cable (s) supplied with this product **MUST** be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.

NOTE: This product has been tested and found to comply with the limit for a Class B Digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide a reasonable protection against harmful interference in a residential environment. This equipment generate, use and radiate radio frequency energy and, if not installed and used according to the instructions found in the users manual, may cause interferences harmful to the operation to other electronic devices. Compliance with FCC regulations does not guarantee that interferences will not occur in all the installations. If this product is found to be the source of interferences, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

- Relocate either this product or the device that is affected by the interference
- Use power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter(s).
- In the case of radio or TV interferences, relocate/ reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to coaxial cable.
- If these corrective measures do not bring any satisfied results, please the local retailer authorized to distribute this type of product. If you cannot locate the appropriate retailer, please contact ARTURIA.
- The above statements apply ONLY to those products distributed in the USA.

6.3 CANADA

NOTICE: This class B digital apparatus meets all the requirements of the Canadian Interference-Causing Equipment Regulation.

AVIS: Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

6.4 EUROPE

