

SEQuel 2.0

Supplementary documentation
(c) 1994 Chris Braymen

SEQuel 2.0 is an update to the original SEQuel 1.0 that corrects a few problems and adds some new features. This is a free update to registered users of SEQuel 1.0. This documentation is intended to augment and not replace the 36 page manual that came with SEQuel 1.0. If you are not a registered owner of SEQuel 1.0 please purchase a copy by sending \$25 + \$5 shipping charge to Chris Braymen, 2817 S. Hartford St, Salt Lake City, UT 84106. We will send you a copy of SEQuel 1.0, the SEQuel manual, and this update.

Listed below are some of the changes:

- SEQuel will no longer hang when using shift-undo to exit back to a hard disk control program.
- Standard MIDI files that are already using SEQuel's 120 ticks per beat will load faster.
- Pressing "undo" at most major menus invokes a "Panic" function that turns off any stuck notes and resets controllers.
- You can set program changes for each track from SEQuel's main screen. No need to enter the event editor to try a different instrument!
- With the **SET START**, **SET END**, and **SET DEST** smartkeys you can easily set the edit range without having to manually enter measure, beat, and tick numbers. You can still modify the edit range manually if you need more precision than the smartkeys deliver.
- A new screen called the "measure level editor" allows you an overview of the next 14 bars on all tracks.
- A new screen called the "step recorder" that allows you to enter notes into your sequence one at a time from your MIDI keyboard. Much easier than entering note events from the event editor!
- A new feature called "Soft thru" allows the MIDI MITE to merge and rechannel the incoming data with the outgoing data. This is almost a necessity if you have two or more MIDI synths!

The addition of these features means SEQuel 2.0 has slightly less memory available for sequences than Sequel 1.0 did. We hope this does not cause too many problems.

Setting Program Changes on the Main Screen

The layout of Sequel's main screen has been changed to allow setting and viewing an initial program change on each track. The "Play", "Rec", and "O/D" columns have been squeezed together and renamed the "P", "R", and "O" columns.

This program change behaves as if it were on measure 1, beat 1, tick 0 although it will not appear in the event editor. If you start playback at measure 1 the program change will be sent to your synth. If you start playback later than measure 1 the front panel program change will not be sent. The front panel program changes are also sent to your synth immediately when they are changed.

You may still place program change events anywhere within your sequence by using the event editor but they will not be reflected in the main screen setting.

When reading in MIDI files created by other sequencers, if a program change is found on measure 1, beat 1, tick 0 it will be placed on the main screen.

The program change field on the main screen defaults to '-' which means "no program change". To set the main screen program change, use the arrow keys to move the highlight bar to the PGM column and press return. Enter a program change number (0-127) to select a program, or you can enter a '-' to clear the program field.

Setting edit ranges with Smart Keys

The edit start, edit end, and edit dest fields on the main screen are visually and functionally the same as in SEQuel 1.0, but there is an easier and quicker way to set those fields. A new set of smartkeys has been added that include the **SET START**, **SET END**, and **SET DEST** keys. Pressing one of these keys will instantly copy the current measure, beat 1, and tick 0 to the corresponding edit field. This is especially useful in the new measure level editor where you can perform block copies and moves without ever having to cursor up to the edit fields and change them manually.

Soft Thru

At the bottom of the main screen, below the IntClk/ExtClk switch, is the "soft thru" switch. It can be set to **ThruOn** or **ThruOff**. Turning soft thru on causes SEQuel to route all the information received at the MIDI IN port back out the MIDI OUT port. If a track is record enabled, the echoed information is rechanneled to that track's channel. If there are no record enabled channels, then the echoed information is not rechanneled. The soft thru feature is especially useful to users who have multiple keyboards or synthesizers. In SEQuel 1.0 it was impossible (without additional hardware) to record from one keyboard while monitoring and having SEQuel drive a second keyboard or synth. For instance, I use a Korg DS-8 as my keyboard but I prefer the sounds on my Roland SC-7. Using soft thru I can play the DS-8's keyboard while recording into SEQuel and listening to the sounds come from the SC-7, all at the same time.

The Measure Level Editor

In SEQuel 1.0 when you pressed the **EDIT** smarkey you entered the event level editor. Now there is an intermediate screen called the measure level editor that gives a 14 bar overview of your sequence. Pressing **EDIT** from the measure level editor will take you to the familiar event editor.

The measure level editor has many of the same options as the main screen. You can save, load, clear, copy, move, transpose, quantize, and velocity scale from the measure level editor. It's advantage is that you can "see" more of your sequence. Measures with something in them are shown as a filled oval. Measures that are defined but have nothing in them are shown as a dash. Measures past the end of a track are blank. You can move your cursor freely among the different tracks and measures. The screen will scroll left and right if you move the cursor off screen. In addition, pressing the home and left or right arrow keys simultaneously will move the current position 10 bars at a time, just like pressing the <Shift>**REW** or <Shift>**FWD** smartkeys.

The **SET START**, **SET END**, and **SET DEST** smartkeys are very handy here. You can move the cursor to the measure where you want to start copying and press **SET START**. Then move to the measure where you want to stop copying and press **SET END**. Finally, move to the measure to copy to and press **SET DEST**. Then press move/copy and select the destination track to complete the edit. It's much faster and more intuitive than blindly trying to set the edit times like in SEQuel 1.0. It's much easier to set the ranges for quantizing and transposing as well.

You can easily select a measure to event edit. Just move the cursor to the measure you want to edit and press the **EDIT** smartkey. This includes blank measures as well. Any changes you make while in the event editor will be reflected in the measure level editor when you return.

The Step Recorder

The step recorder is a screen where you can set up a note's duration, and then enter the note into your sequence by simply pressing the note on your MIDI keyboard. If you are entering a series of quarter notes, you only need to set the duration once, then press the proper notes on your keyboard in order, and the notes will be entered in perfect quantization and time without you having to keep up with a metronome or even play in time.

Enter the step recorder by pressing the **STEP REC** smart key from either the main screen or the measure level editor. The **STEP REC** key is located next to the **QUANTIZE** key in the third set of smartkeys.

There are four editable fields in the step recorder. They are labeled **Current**, **Dur**, **Note**, and **Vel**.

The **Current** field displays the current position of the sequence in terms of measure, beat, and tick. It can be edited by hilighting it, pressing return, and entering a new value. It can also be modified by pressing the up or down arrows. This will advance or retreat the current location by one tick.

The **Dur** field is where you define the duration of the notes and rests you are entering. It defines the length of the "step". The field can be edited by hilighting it, pressing return, and entering a new value. There are several frequently used durations that can be cycled through by pressing the up or down arrow keys. These values are:

000:015	32nd note
000:030	16th note
000:045	dotted 16th note
000:060	eighth note
000:090	dotted eighth note
001:000	quarter note
001:060	dotted quarter note
002:000	half note
003:000	dotted half note
004:000	whole note
006:000	dotted whole note
008:000	double whole note

When you press a note on your MIDI keyboard, or press the **NOTE** or **REST** smartkeys, a note is inserted into the step editor that has the duration you set under **Dur**. The current position is then incremented by the same duration and is ready to receive the next note. If you want to enter multiple notes or a chord in one step, press all the keys in the chord down on your keyboard. Each note will be registered as the key is pushed down but the current position won't be advanced until all the keys are released.

The **Note** field may be used to define the note name that you wish to enter when you press the **NOTE** smartkey or a key on your keyboard. Normally this will be set to **Midi** to allow the note name to be defined by the key on the midi keyboard that was pressed, but if you are using the **NOTE** smartkey to enter notes you need a way to define which note you want to enter. This field may be set to **Midi** or any valid note name (C0 to G10). It can also be changed by pressing the up or down arrow keys to select higher and lower notes.

The **Vel** field allows a velocity to be defined that will be used when inserting note on events. Normally this will be set to **Midi** to allow the velocity to be taken from the Midi keyboard, but if you are using the **NOTE** smartkey to enter notes you need a way to define the velocity you want to enter. This field may be set to **Midi** or any valid velocity (1-127). It can also be changed by pressing the up or down arrow keys to select higher and lower velocities. This field can also be useful if you don't want the velocities your keyboard is sending. Sometimes widely varying velocities can make your music sound "uneven". If you define a specific velocity in the **Vel** field then every note you enter will take that velocity even if you entered the note via Midi.

The **REW** and **FWD** smartkeys move the current position backward and forward one measure respectively. The **NOTE** smartkey manually enters a note into the step editor. It will only function if neither the **Note** or **Vel** fields are set to **Midi**. The **REST** smartkey simply advances the current position by the duration set in the **Dur** field, effectively entering a "Rest". The **BACK ONE** smartkey allows some limited editing of the step editor note stream. It works like a backspace key, deleting the last event and moving the current position back to the deleted event's time. It's mainly designed to be any easy way to correct a goofed note or wrong duration soon after it occurred. If you need more sophisticated editing you should exit the step editor and use the event editor facility.

The **DONE** smartkey is very important! Unlike other SEQuel screens, the Escape key and the **DONE** smartkey do not have the same function. Pressing **DONE** merges your step editor work in with the current track and exits the step editor. Pressing Escape causes SEQuel to abandon what you were doing, throw away your step editor work, and exit the step editor. So if you're happy with what you've done in the step editor and want to keep it, press **DONE**. If you're not happy with your step editor work and want to throw it out, press Escape.

I hope you enjoy this update to the Adam's MIDI sequencer. It has a lot of very professional capabilities and should provide you with many hours of exploration and music making. Please let me know of any problems you run into or questions you have about operating SEQuel.

Our address in your original manual is no longer correct. After visiting Salt Lake City, Utah for the 5th annual Adam convention we decided to move there! Our new address is:

Chris Braymen
Bonafide Systems
2817 S. Hartford Ave.
Salt Lake City, UT 84106
(801) 466-4566
Compuserve: 70057.2035
Internet: Chris.Braymen@SLTRIB.COM