## *The Transform Menu*

The *Transform Menu* contains a collection of utilities that modify sequences and step records in real time. This page is especially useful when you're hunting for new ideas and new directions within a piece.

Page 1: Rotate Sequence

```
40 Xform Rotate   Seq 01
Start>01  End 16
```

The **Rotate** function shifts the steps between the Start Step and the End Step either one place to the left or one place to the right, depending upon the state of the *Shift* button.

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```
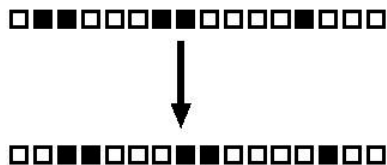
To rotate the sequence, adjust the Start and End Steps as usual and then press the *Select* push button. If the *Shift* button is in Normal mode then all of the steps between the Start Step and the End Step will rotate one step to the right i.e. in the positive direction. If the *Shift* button is in Shift Mode then all of the steps between the Start Step and the End Step will rotate one step to the left i.e. in the negative direction.

In the above example, the Start Step is 01 and the End Step is 16. When the *Select* push button is pressed in Normal mode, all of the steps are rotated in the positive direction.

*Hint: The End Step becomes the Start Step and the Start Step becomes (Start Step + 1).*

Now, suppose that you set the Start Step to 4 and the End Step to 13. When you press the Select push button, all of the steps between the start step and the end step are rotated right one place. Step 5 takes on the values from Step 4, Step 6 takes on the values from Step 5 and so on. The end step, in this case step 13, takes on the values of step 12. But what happens to the values from step 13? They're copied over to the start step, in this case, step 4. The parameters in steps 1, 2, 3, 14, 15 and 16 are unaffected because they are outside of the range set by the start and end steps.

Start Step   End Step

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```

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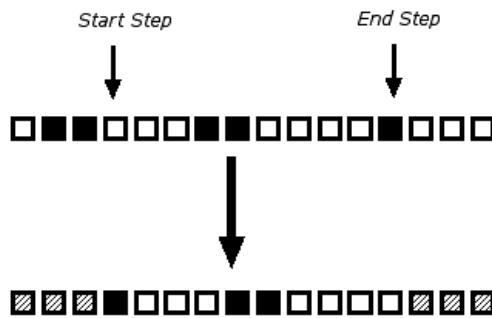
Page 2: Flip Sequence

```
41 Xform Flip    Seq 01
Start>01  End 16
```

Flip swaps the order of all of the steps between the Start Step and the End Step so that the Start Step is now the End Step and what was the End Step is now the Start Step.

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```

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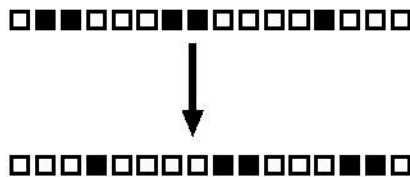
In the above example, the Start Step is 01 and the End Step is 16. After the Flip operation has been completed, Step 01 contains the contents of Step 16, Step 02 contains the contents of Step 15, Step 03 contains the contents of Step 14, etc.

This operation is non-destructive. To restore the sequence to its former state, simply press the *Select* button a second time!

Page 3: Transform Invert

```
42 Xform Invert   Seq 01
Start>01  End 16
```

Invert is a useful function for introducing wild and off-the-wall rhythmic changes to your music. It affects the state of the *Active Step* and *Skipped Step* settings for all of the steps between the Start Step and the End Step.

The effect is as follows:

Active step ->muted step	Normal step -> skipped step
Muted step ->active setp	Skipped step -> normal step

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```
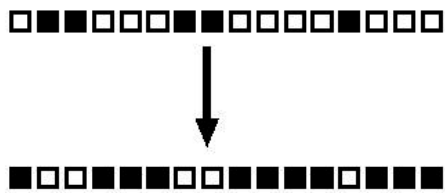
As with the other *Transform* functions, to Invert a sequence, set up the Start Step and the End Step as normal and then press the *Select* push button. *ZEIT* will display a confirmation message and the LEDs on the front panel will redraw to display their revised status.

This operation is also non-destructive. To reverse the operation, simply press the *Select* push button a second time.

Page 4: Transform Merge

```
43 Xform Merge    Seq 01
Start>01   End 16
```

The **merge** function takes the contents of the *Step Edit Copy Buffer* and merges it with the steps between the Start and End Steps. This operation IS destructive. If the *Step Edit Copy Buffer* does not contain any valid data then the factory default settings are used.

Page 5: Transform Note Wrap

```
44 Xform NoteWrap Seq 01
Wrap On  LwN>C4  UpN C5
```

Note Wrap is a post-processing utility similar to the *Force-to-Scale* module. Note Wrap takes three parameters, a simple On/Off setting, *a Lower Note Pitch* and an *Upper Note Pitch*. Any note that is *below* the value set by the *LwN* parameter is reflected back through the *UpN* parameter. Similarly, any note that is above the value set by the *UpN* parameter is reflected back through the *LwN* value.

Suppose that you set a *LwN* value of C4 and a *UpN* value of C6. When the sequence plays a note of C3, which is 12 semitones below *LwN*, NoteWrap reflects this note through *UpN* creating a new note value of C5 – 12 semitones, which is C4. Equally, if the sequence plays a note of B7, which is 2 semitones above *UpN*, then Note Wrap will *reflect* this note back through *LwN* creating a new note of D4.

Page 6: Randomise

```
45 Randomise      Seq 01
Amount>05
```

This page simply sets the amount of randomisation that is applied to the *Note Pitch* and *Note Velocity* settings of all of the steps in a sequence when the *Randomise* push button on the front panel is pressed.

The amount of randomisation applied to the note pitches and note velocities is also based upon the settings for the *Octave Range* and *Root Note* for the currently selected sequence. If an Octave Range of 2 octaves is selected with a Root Note value of C3 then, with the randomisation amount set to its maximum value of 10, then the note pitches following randomisation will vary between C3 and C5 and the note velocities will vary between 1 and 127. With a randomisation amount of 05 the note pitches will vary between G3 and G4 and the note velocities will vary between 32 and 96.

The following pages describe the parameters involved in the *Morph* functions, which are discussed in greater depth in the *Tutorial* section.

Pages 7: Morph Destination

```
47 Morph Dest     Seq 01
10>DeepSpaceGroove
```

This page sets the **Destination** sequence for the *Morph* function. You can select any of the available sequences stored in memory. To select a sequence, press the *Enter* push button as you would in the Sequence Load page and use the Data Wheel to scroll through the available sequences. When you have found the required sequence, press the *Select* push button. *ZEIT* will load the sequence and display a confirmation message.

Page 8: Morph Setup

```
48 Morph Setup    Seq 01
Loop>On    Dwell 03
```

This page sets two *Morph* control parameters, the **Loop On/Off** flag and the **Dwell** Count. For more information on how these parameters affect the Morphing process, please consult the *Tutorial* section of this manual.

Page 9: Morph Status

```
49 Morph Status   Seq 01
Morph>On
```

The **Morph Status** page is used to switch the Morphing process on and off. To switch on the Morphing process, select the field with the *Enter* push button and turn the Data Wheel clockwise. To switch off the Morphing process, turn the Data Wheel anticlockwise.