

Creating RPS Sequences from Standard MIDI Files on the XP-50

The Roland XP-50 Music Workstation is unique in its ability to follow your cues as the music director, keyboardist, live performer – in real-time! Normally, when using MIDI files to accompany your performances, you have to decide ahead of time: how many verses, how many choruses, how long the intro is, what order all these sections are in, etc. Now, MIDI files can be as flexible as a live band with “RPS” – Real-time Phrase Sequencing on the XP-50. This document will explain the procedure for converting an existing Standard MIDI File into an interactive RPS sequence.

Loading a Standard MIDI File into Memory

In order to create an interactive RPS sequence, you must first load the Standard MIDI File into the XP-50's internal memory. Use the following procedure to load a Standard MIDI File:

- 1) Insert a disk that contains a Standard MIDI File into the XP-50 Music Workstation.
- 2) If the file was written for a General MIDI instrument, press the GM (PERFORM) button while holding SHIFT.
- 3) Press DISK/UTILITY.
- 4) Press “2” on the keypad to select LOAD.
- 5) Press “1” to select SONG.
- 6) Use the ALPHA DIAL to select the song you wish to load and press ENTER.
- 7) Press PLAY and listen to the whole song noting the measure numbers where various sections of the song begin (i.e. intro, verse, chorus, etc). We will convert these sections into Patterns.

Creating Patterns

The next step is to copy a range of measures into various Pattern locations on the XP-50.

- 1) Press EDIT so it is lit.
- 2) Press the TRACK EDIT (1/9) button (to the right of EDIT).
- 3) CURSOR to “Type” and use the ALPHA DIAL to select “03: COPY.”
- 4) Press the CURSOR RIGHT (▶) button twice to move the cursor to “Dest” (destination).
- 5) Use the ALPHA DIAL to select “PTN 001.”
- 6) CURSOR to “Source” and use the ALPHA DIAL to select “ALL.”
- 7) Press the CURSOR RIGHT (▶) button to move the cursor to the “Measure” parameters.
- 8) Use the ALPHA DIAL and CURSOR LEFT and RIGHT (◀▶) buttons to select the measures to be copied to PTN 001. For example, the verse might start on measure 20 and last for 8 bars. The display for this example would look like this:

Measure
20 for 8 → 1

NOTE: The measure where the copy will begin is indicated to the right of the arrow. In the example above, the data will be copied starting at the first measure of Pattern 001.

- 9) CURSOR to “Channel” and use the ALPHA DIAL to select “ALL.”
- 10) Once you have finished setting the copy parameters, press ENTER. “Executing” will be displayed.
- 11) Repeat steps 2-8 to create more Patterns from any range of measures in the song. Remember to select a new Pattern in step 5 each time you do this.

NOTE: Be aware that the first few measures of many Standard MIDI Files contains only setup data for that song and the note data does not always begin on the first measure. If this is the case, it is advisable that this setup data be assigned to a separate RPS Pattern and played back before any other Patterns to ensure that the proper sounds are selected.

Assigning Patterns to Keys

Now that we have created Patterns that contain different sections of the song, we will assign those Patterns to be triggered by keys on the keyboard.

- 1) Press the RPS (6/14) button.
- 2) Use the ALPHA DIAL to set the Trigger Quantize to "MEASURE."
- 3) Press the CURSOR DOWN (▼) button.
- 4) Press the key on the keyboard from which you want to trigger this Pattern.
- 5) Use the ALPHA DIAL to select the desired Pattern.
- 6) CURSOR to "Playback Mode" and use the ALPHA DIAL to select "LOOP 1." This specifies that the Pattern will play only when the key is held down.
- 7) Press the RPS button (under SYSTEM) so it is lit.
- 8) Press the key to which you have assigned a Pattern. It will play as long as you hold it.
- 9) Repeat steps 4-5 to assign other Patterns to keys on the keyboard.

Synchronizing RPS Patterns to the Song

To synchronize RPS Patterns, you will need to play the XP-50's internal sequencer so that all Patterns will play at the tempo designated by the sequencer. This is also necessary to ensure that the Trigger Quantize function that we set to "Measure" (in the previous section) will function properly. With Trigger Quantize set to "Measure," each Pattern you trigger will begin on the first beat of the next measure. This will help prevent timing glitches if you happen to trigger a Pattern too early or late.

It is a good idea to erase any existing song data from the XP-50's internal sequencer. This will allow us to play the sequencer for tempo purposes while preventing any unwanted song data from playing back with the RPS Patterns. Use the following procedure to erase the song data:

- 1) Press the SEQUENCER and EDIT buttons so they are lit.
- 2) Press the TRK EDIT (1/9) button (to the right of EDIT).
- 3) Use the ALPHA DIAL to select "01:ERASE."
- 4) CURSOR to "Target" and use the ALPHA DIAL to select "TRK ALL."
- 5) CURSOR to "Status" and use the ALPHA DIAL to select "ALL."
- 6) CURSOR to "Measure" and use the ALPHA DIAL to select "1 for ALL."
- 7) CURSOR to "Channel" and use the ALPHA DIAL to select "ALL."
- 8) Press ENTER. "Executing" will be displayed.

We can use the XP-50's Loop Playback mode to ensure that tempo information will be generated continually. Use the following procedure to enable Loop Playback:

- 1) Press LOOP so it is lit.
- 2) Press PLAY.
- 3) Press any of the RPS keys you assigned earlier and notice how you can trigger another RPS key without it actually starting until the next measure.

Saving your RPS Sequence

Now that we have created several RPS Patterns, it is a good idea to save this information to disk. Don't worry, this won't erase or replace the original MIDI file we started with.

- 1) Press DISK/UTILITY.
- 2) Press "3" on the keypad to select "SAVE."
- 3) Press "1" to select "SONG."
- 4) To name the song use the LEFT and RIGHT CURSOR (◀▶) buttons to move between the characters and the ALPHA DIAL or keypad to select the desired character.
- 5) Press ENTER to save the song. The song will be saved as an XP-50 (.SVQ) file.

Playing your RPS Sequence

The XP-50 has the ability to playback files without loading them into memory. Use the following procedure to playback your RPS sequence directly from the disk:

- 1) Press SEQUENCER so it is lit and CURSOR to the song number (i.e. "00: Internal Song").
- 2) Use the ALPHA DIAL to select the .SVQ file you just created.
- 3) Press ENTER followed by PLAY. Your RPS Patterns can now be triggered by playing the appropriate keys.

In addition to making Standard MIDI Files (or XP-50 files) interactive, RPS Patterns are useful in other ways such as trying different arrangements or rehearsing specific sections of your songs. We hope this document gives you a better understanding of how RPS sequences are created on the XP-50.