## **Seven Bird Watchers**

# for drum machine ensemble

By Joo Won Park (2019)

#### Hardware and Performer Requirements

- 3 or more Korg Volca Beats: Each drum machine is about \$150
- 1 media player: can be an mp3 player, computer, phone, or other devices that can play a media file.
- 1 mixer or audio signal splitter: a device that can send the audio file player's output to each drum machine
- 3 or more **3.5mm stereo cables** for syncing. Adapters may be necessary depending on the mixer
- 3 or more **performers** willing to learn and play drum machine as an ensemble

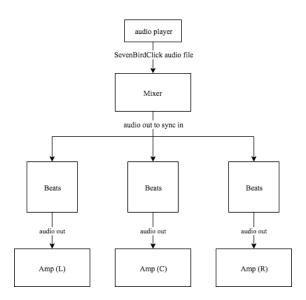
#### **Performance Setup**

- 1. On Volca Beats, program and save a patch with the pattern notated below (16-step pattern chart)
- 2. Download and print SevenBirdWatchers.pdf
- 3. Download *SevenBirdClick.mp3*, or *SevenBirdClick.aif* (www.joowonpark.net/sevenbirdwatchers) to the media player. Performers should be able to read the minutes and seconds of the audio playback
- 4. Connect the output of the media player to Sync-In of Volca Beats
- 5. Connect the output of Volca Beats to amplifiers. A stereo PA or separate amplifiers for each machine are recommended.
- 6. Press play on Volca Beats. If the synced correctly, there will be no sound
- 7. Press play on the media player. If the synced correctly, there will be sound on all drum machines

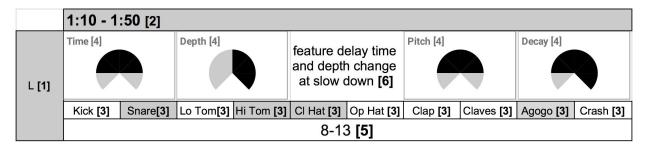
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Kick	Х	2				Х				Х				х			
Snare						Х								х			
Lo Tom					X	X				X						x	
Hi Tom			Х	Х		Х	Х	х		Х		Х	Х		X		Х
CL Hat	Х			Х		Х		х		Х		Х		х		X	
OP Hat			Х		х		Х		х		х		Х		x		Х
Clap						Х								х			
Claves	Х	Ľ	х	Х	х	Х	Х	х	х	Х	х	Х	Х	х	X	х	Х
Agogo	Х	ſ	X	x	X	X	X	x	x	Х	X	x	x	x	X	x	X
Crash					х	Х	Х	х						х	х		
Stutter/S	peed	/Gl	lobal S	Stutter	: On												

16-step pattern chart (X: on/active step)

Below is a *possible set up using a mixer and three amps*. The setup may have an audio splitter instead of a mixer, or a stereo PA system instead of three amps.



#### **Score Interpretation**



[1] : Parts name. There are three parts labeled as *Left*, *Center*, and *Right*. L's sound should be on the left side of the stage, C on the center, and R on the right, creating a wide stereo image. If there are more than 3 performers, multiple devices can double the part

[2]: Corresponding time of the audio track. Each section is divided according to min: sec of the sync track. In the example above, player L should play the section between 1:10 to 1:50 of the audio file playback

[3]: Muted/unmuted parts: Darkened instrument names should be unmuted (i.e., should make a sound) Mute instruments in white rectangles. In the example above, only *Snare*, *Hi Tom*, *Cl Hat*, *and Agogo* are making sounds
[4]: Knob ranges. The two knobs on the left depict *Time* and *Depth* knob of the *Stutter* function. The two right knobs depict any active knobs that have a label with *Pitch/PCM Speed* and *Decay*. Freely move the knobs in the indicated range. In the example above, move the *Time* knob of *Stutter* between 9 O'clock and 3 O'clock angle. The performer also changes the *PCM Speed* of *Agogo* and *Closed Decay* of *Cl Hat* knobs

[5]: Step numbers. Change the number of active steps in a given range. In the example above, a performer can use *Active Step* function to choose the number of active steps from 8 to 13 steps. There are sometimes two sets of numbers present (e.g., 1-2, 5-16). For a small number of steps, use *Step Jump* for swifter change.

[6]: Additional instructions explaining featured techniques in each section. In the example above, the score instructs the performer to feature Stutter (delay) time and depth change when improvising

#### **Performance Notes**

*Seven Bird Watchers* is an electronic ensemble piece featuring synchronized tempo change and graphical notation. The pre-recorded audio file syncs all drum machines to seven sections of accelerando and ritardando. The performers' task is to change the parameters of the drum machine according to the notation.

- **Change parameters continuously**. This is the most important aspect of the piece. Do not stay in one knob position or step numbers for a long time
- Start changing the parameters to match each section's notation at the beginning of each section. Gradually change the number of steps and active instruments. It is OK if you manage to change to notated parameters towards the end of the section
- Learn the following functions of Volca Beats thoroughly before the rehearsal
  - *PCM Speed* change for *Clap*, *Claves*, *Agogo*, and *Crash*
  - Stutter Time and Depth
  - Step Jump and Active Step

### Resources

Tutorial video and performance demo are available at www.joowonpark.net/sevenbirdwatchers

	0:00 - 0	:35								
	Time		Depth				Pitch		Decay	
Left										
	Kick	Snare	Lo Tom	Hi Tom	CI Hat	Op Hat	Clap	Claves	Agogo	Crash
					0 (do not play)					
									1	
Center	Time		Depth		Solo - a constantly paran		Pitch		Decay	
	Kick	Snare	Lo Tom	Hi Tom	CI Hat	Op Hat	Clap	Claves	Agogo	Crash
					3	- 6				
	Time		Depth				Pitch		Decay	
Right										
	Kick	Snare	Lo Tom	Hi Tom	CI Hat	Op Hat	Clap	Claves	Agogo	Crash
					0 (do n	ot play)				
	0:35 - 1	:10								
L	0:35 - 1 Time	:10	Depth		always co chai paran		Pitch		Decay	
L		:10 Snare	Depth Lo Tom	Hi Tom	chai	nge neters		Claves		Crash
L	Time			Hi Tom	chai paran Cl Hat	nge	Pitch	Claves	Decay Agogo	Crash
L	Time			Hi Tom	chai paran Cl Hat	nge neters Op Hat		Claves		Crash
L	Time			Hi Tom	char paran CI Hat 4 always co char	nge neters Op Hat - 8 onstantly		Claves		Crash
	Time Kick		Lo Tom	Hi Tom	char paran CI Hat 4 always co char	nge neters Op Hat - 8 Onstantly nge	Clap	Claves	Agogo	Crash
	Time Kick Time	Snare	Lo Tom Depth		CI Hat always co char paran	nge neters Op Hat - 8 onstantly nge neters	Clap		Agogo	
	Time Kick Time	Snare	Lo Tom Depth		CI Hat always co char paran	Op Hat Op Hat - 8 Onstantly nge neters Op Hat	Clap		Agogo	
	Time Kick Time	Snare	Lo Tom Depth		char paran CI Hat always co char paran CI Hat 3 always co char	Op Hat - 8 Onstantly nge neters Op Hat - 9 Onstantly	Clap		Agogo	
С	Time Kick Time Kick	Snare	Lo Tom Depth Lo Tom		char paran CI Hat always co char paran CI Hat 3 always co char	Op Hat - 8 - 8 - 8 - 9 - 9 - 9 - 9	Clap Pitch Clap		Agogo Decay Agogo	

	1:10 - 1	:50								
L	Time		Depth		feature de and depti at slow		Pitch		Decay	
	Kick	Snare	Lo Tom	Hi Tom	Cl Hat	Op Hat	Clap	Claves	Agogo	Crash
					8-	13		1		1
									0	
С	Time		Depth		feature de and depth at slow		Pitch		Decay	
	Kick	Snare	Lo Tom	Hi Tom	Cl Hat	Op Hat	Clap	Claves	Agogo	Crash
					2	-7				
R	Time		Depth		feature de and depth at slow		Pitch		Decay	
	Kick	Snare	Lo Tom	Hi Tom	Cl Hat	Op Hat	Clap	Claves	Agogo	Crash
		-	-		6-	12	•			
	1:50 - 2	:40								
L	<b>1:50 - 2</b> Time	:40	Depth		feature c repe	one-step tition	Pitch		Decay	
L	Time	:40		Hi Tom	repe	tition		Claves		Crash
L			Depth Lo Tom	Hi Tom 1-3 (FL		tition Op Hat	Clap	Claves	Decay Agogo	Crash
L	Time		Lo Tom		repe Cl Hat	tition Op Hat	Clap P), 5-16	1		Crash
L	Time				repe Cl Hat	tition Op Hat EP JUMF one-step	Clap	1		Crash
	Time Kick		Lo Tom		repe CI Hat JNC+STE	tition Op Hat EP JUMF one-step	Clap P), 5-16	1	Agogo	Crash
	Time Kick Time	Snare	Lo Tom	1-3 (FL Hi Tom	repe CI Hat JNC+STE feature c repe	tition Op Hat EP JUMF one-step tition Op Hat	Clap P), 5-16 Pitch Clap	Claves	Agogo	
	Time Kick Time Kick	Snare	Lo Tom	1-3 (FL Hi Tom	repe CI Hat JNC+STE feature c repe CI Hat	tition Op Hat EP JUMF one-step tition Op Hat	Clap P), 5-16 Pitch Clap P), 5-16	Claves	Agogo Decay Agogo	
	Time Kick Time	Snare	Lo Tom	1-3 (FL Hi Tom	repe CI Hat JNC+STE feature of repe CI Hat JNC+STE	tition Op Hat EP JUMF one-step tition Op Hat EP JUMF	Clap P), 5-16 Pitch Clap	Claves	Agogo	
С	Time Kick Time Kick	Snare	Lo Tom	1-3 (FL Hi Tom	repe CI Hat JNC+STE feature of repe CI Hat JNC+STE	tition Op Hat EP JUMF one-step tition Op Hat EP JUMF	Clap P), 5-16 Pitch Clap P), 5-16	Claves	Agogo Decay Agogo	

	2:40-3:	35								
L	Time		Depth		delay tim and recor	e short ne. Make rd chaotic change	Pitch		Decay	
	Kick	Snare	Lo Tom	Hi Tom	Cl Hat	Op Hat	Clap	Claves	Agogo	Crash
		•		I	11	-16		J		L
С	Time		Depth		delay Introduc	e short time. e Kick at down	Pitch		Decay	
	Kick	Snare	Lo Tom	Hi Tom	Cl Hat	Op Hat	Clap	Claves	Agogo	Crash
					3-	12				
R	Time		Depth		delay tim and recor	e short ne. Make rd chaotic change	Pitch		Decay	
	Kick	Snare	Lo Tom	Hi Tom	CI Hat	Op Hat	Clap	Claves	Agogo	Crash
		-	_	-	3	-8				-
					0	-0				
	3:35-4:4	45				-0				
L	3:35-4:4 Time	45	Depth		Feature repetition slow pite	one-step a. Feature ch up or motion	Pitch		Decay	
L		45 Snare	Depth Lo Tom	Hi Tom	Feature repetition slow pite	one-step I. Feature ch up or	Pitch	Claves	Decay	Crash
L	Time				Feature repetition slow pite down CI Hat	one-step I. Feature ch up or motion	Clap	Claves		Crash
L	Time Kick		Lo Tom		Feature repetition slow pite down CI Hat	one-step 1. Feature ch up or motion Op Hat	Clap P), 6-13	Claves	Agogo	Crash
L	Time				Feature repetition slow pite down CI Hat JNC+ST Feature repetition slow pite	one-step a. Feature ch up or motion Op Hat EP JUMF	Clap	Claves		Crash
	Time Kick		Lo Tom		Feature repetition slow pite down CI Hat JNC+ST Feature repetition slow pite	one-step 1. Feature ch up or motion Op Hat EP JUMF one-step 1. Feature ch up or	Clap P), 6-13	Claves	Agogo	Crash
	Time Kick Time	Snare	Lo Tom Depth	1-3 (FU	Feature repetition slow pito down CI Hat JNC+ST Feature repetition slow pito down CI Hat	one-step h. Feature ch up or motion Op Hat EP JUMF one-step h. Feature ch up or motion	Clap P), 6-13 Pitch Clap		Agogo	
	Time Kick Time Kick	Snare	Lo Tom	1-3 (FU	Feature repetition slow pite down CI Hat JNC+ST Feature repetition slow pite down CI Hat JNC+ST	one-step h. Feature ch up or motion Op Hat EP JUMF one-step h. Feature ch up or motion Op Hat EP JUMF	Clap P), 6-13 Pitch Clap P), 6-12		Agogo Decay Agogo	
	Time Kick Time	Snare	Lo Tom Depth	1-3 (FU	Feature repetition slow pite down CI Hat JNC+ST Feature repetition slow pite down CI Hat JNC+ST Feature repetition slow pite	one-step h. Feature ch up or motion Op Hat EP JUMF one-step h. Feature ch up or motion Op Hat EP JUMF	Clap P), 6-13 Pitch Clap		Agogo	
С	Time Kick Time Kick	Snare	Lo Tom	1-3 (FU Hi Tom 1-3 (FU Hi Tom	Feature repetition slow pite down CI Hat JNC+ST Feature repetition slow pite down CI Hat JNC+ST Feature repetition slow pite down	one-step h. Feature ch up or motion Op Hat EP JUMF one-step h. Feature ch up or motion Op Hat EP JUMF one-step h. Feature ch up or	Clap P), 6-13 Pitch Clap P), 6-12 Pitch Clap		Agogo Decay Agogo	

	4:45 - 6	:10								
L	Time		Depth			provise. climax coda	Pitch		Decay	
	Kick	Snare	Lo Tom	Hi Tom	Cl Hat	Op Hat	Clap	Claves	Agogo	Crash
		1			1-	16	· ·			
С	Time		Depth			provise. climax coda	Pitch		Decay	
	Kick	Snare	Lo Tom	Hi Tom	Cl Hat	Op Hat	Clap	Claves	Agogo	Crash
					1-	16				
R	Time		Depth			provise. climax coda	Pitch		Decay	
	Kick	Snare	Lo Tom	Hi Tom	Cl Hat	Op Hat	Clap	Claves	Agogo	Crash
					· · · · · ·					
					1-	16				
	6:10 - 6	:35			1-	16				
L	6:10 - 6 Time	:35	Depth		1-	16	Pitch		Decay	
L		:35	Depth Lo Tom	Hi Tom	1-	16 Op Hat	Pitch	Claves	Decay	Crash
L	Time			Hi Tom	CI Hat			Claves		Crash
L	Time Kick		Lo Tom	Hi Tom	CI Hat	Op Hat	Clap	Claves	Agogo	Crash
L	Time			Hi Tom	Cl Hat 1 Kick Deca	Op Hat		Claves		Crash
	Time Kick		Lo Tom	Hi Tom Hi Tom	Cl Hat 1 Kick Deca	Op Hat 6 ay should	Clap	Claves	Agogo	Crash
	Time Kick Time	Snare	Lo Tom		CI Hat 1 Kick Deca be	Op Hat 6 ay should long	Clap		Agogo	
	Time Kick Time Kick	Snare	Lo Tom		CI Hat 1 Kick Deca be	Op Hat 6 ay should ong Op Hat	Pitch Clap		Agogo Decay Agogo	
	Time Kick Time	Snare	Lo Tom		CI Hat 1 Kick Deca be	Op Hat 6 ay should ong Op Hat	Clap		Agogo	
С	Time Kick Time Kick	Snare	Lo Tom		CI Hat 1 Kick Deca be	Op Hat 6 ay should ong Op Hat	Pitch Clap		Agogo Decay Agogo	