



MUSIC PRODUCTION STUDIO

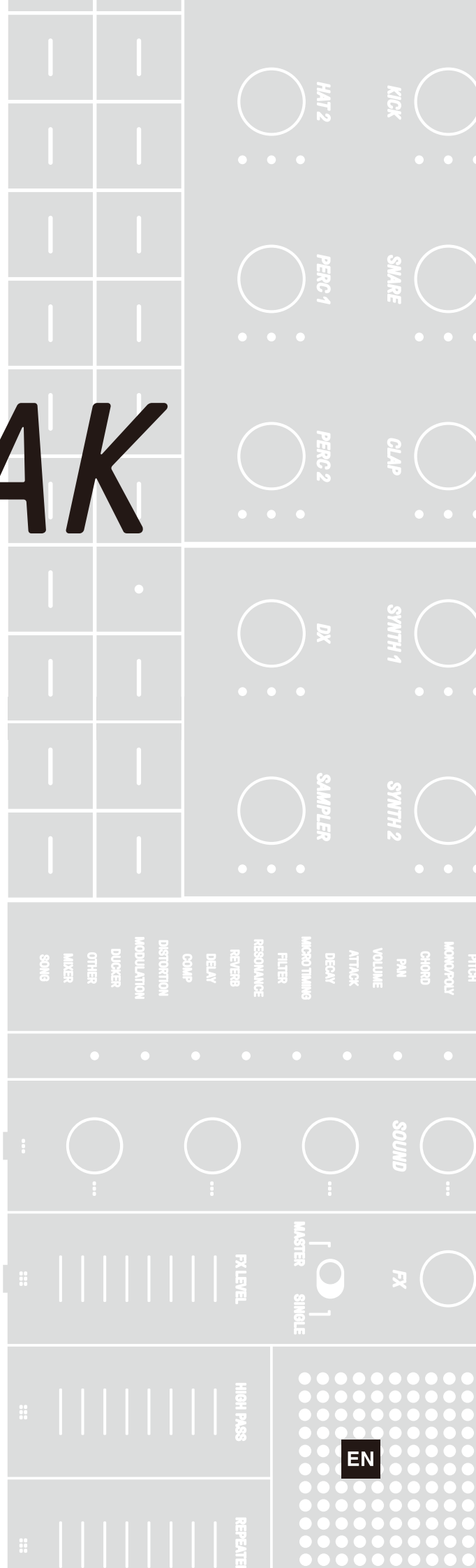
# SEQTRAK

## Data List

For OS V1.10

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## Track Type

Track Name	Track Group	MIDI Channel
KICK	Drum	1
SNARE	Drum	2
CLAP	Drum	3
HAT 1	Drum	4
HAT 2	Drum	5
PERC 1	Drum	6
PERC 2	Drum	7
SYNTH 1	Synth	8
SYNTH 2	Synth	9
DX	DX	10
SAMPLER	SAMPLER	11

# Sound List

## Sound Category

No.	Drum	Synth	DX	SAMPLER
1	Kick	Bass	Bass	Vocal Count
2	Snare	Synth Lead	Synth Lead	Vocal Phrase / Chant
3	Rim	Piano	Piano	Singing Vocal
4	Clap	Keyboard	Keyboard	Robotic Vocal / Effect
5	Snap	Organ	Organ	Riser
6	Closed HiHat	Pad	Pad	Laser / Sci-Fi
7	Open HiHat	Strings	Strings	Impact
8	Shaker / Tambourine	Brass	Brass	Noise / Distorted Sound
9	Ride	Woodwind	Woodwind	Ambient / Soundscape
10	Crash	Guitar	Guitar	SFX
11	Tom	World	World	Scratch
12	Bell	Mallet	Mallet	Nature / Animals
13	Conga / Bongo	Bell	Bell	Hit / Stab / Musical Instrument Sound
14	World	Rhythmic	Rhythmic	Percussion
15	SFX	SFX	SFX	Recorded Sound

## Drum Sound

No.	Name	Category
1	Tight Punchy Kick 1	Kick
2	Tight Punchy Kick 2	Kick
3	Tight Punchy Kick 3	Kick
4	Tight Punchy Kick 4	Kick
5	Tight Punchy Kick 5	Kick
6	Tight Punchy Kick 6	Kick
7	Tight Punchy Kick 7	Kick
8	Tight Punchy Kick 8	Kick
9	Soft Kick 1	Kick
10	Tight Soft Kick 1	Kick
11	Tight Soft Kick 2	Kick
12	Tight Soft Kick 3	Kick
13	Tight Soft Kick 4	Kick
14	Tight Soft Kick 5	Kick
15	Tight Soft Kick 6	Kick
16	Tight Soft Kick 7	Kick
17	Punchy Fat Kick 1	Kick
18	Punchy Fat Kick 2	Kick
19	Punchy Fat Kick 3	Kick
20	Punchy Fat Kick 4	Kick
21	Punchy Fat Kick 5	Kick
22	Bitcrushed Punchy Kick 1	Kick
23	Punchy Fat Kick 6	Kick
24	Punchy Fat Kick 7	Kick
25	Distorted Kick 1	Kick
26	Distorted Kick 2	Kick
27	Distorted Kick 3	Kick
28	Distorted Kick 4	Kick
29	Distorted Kick 5	Kick
30	Distorted Kick 6	Kick
31	Distorted Kick 7	Kick
32	Distorted Kick 8	Kick
33	Saturated Tight Kick 1	Kick
34	Saturated Fat Kick 1	Kick
35	Saturated Tight Kick 2	Kick
36	Saturated Fat Kick 2	Kick
37	Saturated Fat Kick 3	Kick
38	Saturated Fat Kick 4	Kick
39	Saturated Fat Kick 5	Kick
40	Saturated Fat Kick 6	Kick
41	Saturated Fat Kick 7	Kick
42	Punchy Saturated Kick 1	Kick

No.	Name	Category
43	Saturated Fat Kick 8	Kick
44	Saturated Fat Kick 9	Kick
45	Bitcrushed Kick 1	Kick
46	Bitcrushed Kick 2	Kick
47	Bitcrushed Kick 3	Kick
48	Bitcrushed Kick 4	Kick
49	Rumble Kick 1	Kick
50	Rumble Kick 2	Kick
51	Rumble Kick 3	Kick
52	Rumble Kick 4	Kick
53	Rumble Kick 5	Kick
54	Punchy Kick + Reverb 1	Kick
55	Punchy Kick + Reverb 2	Kick
56	Punchy Kick + Reverb 3	Kick
57	Muffled Kick 1	Kick
58	Muffled Kick 2	Kick
59	Muffled Kick 3	Kick
60	Muffled Kick 4	Kick
61	Muffled Kick 5	Kick
62	Muffled Kick 6	Kick
63	Lo-Fi Kick 1	Kick
64	Lo-Fi Kick 2	Kick
65	RX7 Kick 1	Kick
66	RX5 Kick 1	Kick
67	RX15 Kick 1	Kick
68	RX7 Kick 2	Kick
69	RX5 Kick 2	Kick
70	RX7 Kick 3	Kick
71	RX7 Kick 4	Kick
72	RX7 Kick 5	Kick
73	Acoustic Kick - Standard 1	Kick
74	Acoustic Kick - Standard 2	Kick
75	Acoustic Kick - Standard 3	Kick
76	Acoustic Kick - Standard 4	Kick
77	Acoustic Kick - Rock 1	Kick
78	Acoustic Kick - Modern Rock 1	Kick
79	Acoustic Kick - Jazz 1	Kick
80	Acoustic Kick - Maple 1	Kick
81	Modulated Kick 1	Kick
82	Modulated Kick 2	Kick
83	Punchy Kick + Electronic Ping 1	Kick
84	Muffled Kick + Bell 1	Kick

Sound List

No.	Name	Category
85	Punchy Kick + Perc 1	Kick
86	Kick + Shaker 1	Kick
87	Kick + Open Hat 1	Kick
88	Kick + Open Hat 2	Kick
89	Tonal Kick C	Kick
90	Tonal Kick C#	Kick
91	Tonal Kick D	Kick
92	Tonal Kick D#	Kick
93	Tonal Kick E	Kick
94	Tonal Kick F	Kick
95	Tonal Kick F#	Kick
96	Tonal Kick G	Kick
97	Tonal Kick G#	Kick
98	Tonal Kick A	Kick
99	Tonal Kick A#	Kick
100	Tonal Kick B	Kick
101	Distorted Tonal Kick C	Kick
102	Distorted Tonal Kick C#	Kick
103	Distorted Tonal Kick D	Kick
104	Distorted Tonal Kick D#	Kick
105	Distorted Tonal Kick E	Kick
106	Distorted Tonal Kick F	Kick
107	Distorted Tonal Kick F#	Kick
108	Distorted Tonal Kick G	Kick
109	Distorted Tonal Kick G#	Kick
110	Distorted Tonal Kick A	Kick
111	Distorted Tonal Kick A#	Kick
112	Distorted Tonal Kick B	Kick
113	Tight Snare 1	Snare
114	Tight Snare 2	Snare
115	Tight Snare 3	Snare
116	Short Pitched Snare 1	Snare
117	Tight Snare 4	Snare
118	Tight Snare + Reverb 1	Snare
119	Tight Punchy Snare + Reverb 1	Snare
120	Tight Snare 5	Snare
121	Pitched Snare 1	Snare
122	Tight Snare 6	Snare
123	Tight Snare + Reverb 2	Snare
124	Tight Snare + Reverb 3	Snare
125	Tight Snare + Reverb 4	Snare
126	Tight Snare + Reverb 5	Snare
127	Tight Punchy Snare 1	Snare
128	Punchy Fat Snare 1	Snare

No.	Name	Category
129	Distorted Pitched Snare 1	Snare
130	Distorted Punchy Snare 1	Snare
131	Punchy Fat Snare 2	Snare
132	Distorted Fat Snare 1	Snare
133	Distorted Fat Snare 2	Snare
134	Punchy Fat Snare 3	Snare
135	Punchy Fat Snare 4	Snare
136	Punchy Fat Snare 5	Snare
137	Distorted Low Snare 1	Snare
138	Distorted Low Snare 2	Snare
139	Punchy Long Snare 1	Snare
140	Punchy Long Snare 2	Snare
141	Click Wood Snare 1	Snare
142	Double Click Snare 1	Snare
143	Short Slow Snare 1	Snare
144	Lo-Fi Snare 1	Snare
145	Lo-Fi Snare 2	Snare
146	Lo-Fi Snare 3	Snare
147	Lo-Fi Snare 4	Snare
148	Lo-Fi Snare 5	Snare
149	Short Can Snare 1	Snare
150	Muffled Snare 1	Snare
151	Tight Snare + Reverb 6	Snare
152	Tight Snare + Reverb 7	Snare
153	Snare + Reverb 1	Snare
154	Snare + Reverb 2	Snare
155	Muffled Snare + Reverb 1	Snare
156	Muffled Snare + Reverb 2	Snare
157	Pitched Snare + Reverb 1	Snare
158	Muffled Snare + Reverb 3	Snare
159	Muffled Snare + Reverb 4	Snare
160	Fat Snare + Reverb 1	Snare
161	Punchy Snare + Reverb 1	Snare
162	Distorted Snare + Reverb 1	Snare
163	Gated Reverb Snare 1	Snare
164	Gated Reverb Snare 2	Snare
165	Spring Snare 1	Snare
166	Trash Snare + Reverb 1	Snare
167	Trash Snare + Reverb 2	Snare
168	Trash Snare + Reverb 3	Snare
169	Rx5 Snare 1	Snare
170	Rx5 Snare 2	Snare
171	RX7 Snare 1	Snare
172	RX7 Snare 2	Snare

Sound List

No.	Name	Category
173	RX7 Snare 3	Snare
174	RX7 Snare 4	Snare
175	RX7 Snare 5	Snare
176	RX7 Snare 6	Snare
177	Acoustic Snare - Standard 1	Snare
178	Acoustic Snare - Standard 2	Snare
179	Acoustic Snare - Soul 1	Snare
180	Acoustic Snare - Standard 3	Snare
181	Acoustic Snare - Standard 4	Snare
182	Acoustic Snare - Punchy 1	Snare
183	Acoustic Snare - Punchy 2	Snare
184	Acoustic Snare - Metallic 1	Snare
185	Acoustic Snare - Punchy 3	Snare
186	Acoustic Snare - Tight 1	Snare
187	Acoustic Snare - Tight 2	Snare
188	Acoustic Snare + Reverb 1	Snare
189	Acoustic Snare - Punchy 4	Snare
190	Acoustic Snare - Punchy 5	Snare
191	Acoustic Snare - Brush 1	Snare
192	Acoustic Snare - Brush Tap 1	Snare
193	Acoustic Snare - Flam 1	Snare
194	Glitch Snare 1	Snare
195	Glitch Snare 2	Snare
196	Glitch Snare 3	Snare
197	Hardcore Snare 1	Snare
198	Hardcore Snare 2	Snare
199	Hardcore Snare 3	Snare
200	Hardcore Snare 4	Snare
201	Hardcore Snare 5	Snare
202	Snare + Wood Block 1	Snare
203	Snare + Wood Block 2	Snare
204	Wood Snare 1	Snare
205	Factory Snare + Reverb 1	Snare
206	Metallic Snare 1	Snare
207	Metallic Snare 2	Snare
208	Metallic Snare 3	Snare
209	Metallic Snare 4	Snare
210	Metallic Snare 5	Snare
211	Glass Broken Snare 1	Snare
212	Glass Broken Snare 2	Snare
213	SFX Snare 1	Snare
214	SFX Snare 2	Snare
215	Acoustic Rim - Jazz 1	Rim
216	Acoustic Rim - Oak 1	Rim

No.	Name	Category
217	Acoustic Rim - Fat 1	Rim
218	Acoustic Rim - Rock 1	Rim
219	Acoustic Rim - Standard 1	Rim
220	Acoustic Rim - High 1	Rim
221	RX11 Rim 1	Rim
222	RX5 Rim 1	Rim
223	Acoustic Rim - Short 1	Rim
224	Analog Rim 1	Rim
225	Analog Rim 2	Rim
226	Pitched Rim 1	Rim
227	Lo-Fi Rim 1	Rim
228	Lo-Fi Rim 2	Rim
229	Lo-Fi Rim 3	Rim
230	Stick Rim 1	Rim
231	Acoustic Rim - Short 2	Rim
232	High Pitched Rim 1	Rim
233	Double Click Rim 1	Rim
234	Acoustic Rim + Reverb 1	Rim
235	Lo-Fi Rim + Reverb 1	Rim
236	Acoustic Rim + Reverb 2	Rim
237	Acoustic Rim + Reverb 3	Rim
238	Noisy Rim 1	Rim
239	Noisy Rim 2	Rim
240	Noisy Rim 3	Rim
241	Noisy Rim 4	Rim
242	Noisy Rim 5	Rim
243	Noisy Rim 6	Rim
244	Noisy Rim 7	Rim
245	Metallic Rim 1	Rim
246	Double Click Rim 2	Rim
247	Rim + Low 1	Rim
248	Click Rim + Low 1	Rim
249	Hand Clap 1	Clap
250	Hand Clap 2	Clap
251	Hand Clap 3	Clap
252	Hand Clap 4	Clap
253	Group Clap 1	Clap
254	Group Clap 2	Clap
255	Group Clap 3	Clap
256	Group Clap 4	Clap
257	Hand Clap 5	Clap
258	Bright Clap 1	Clap
259	Bright Clap 2	Clap
260	Lo-Fi Thin Clap 1	Clap

## Sound List

No.	Name	Category
261	Wide Thin Clap 1	Clap
262	Bright Clap 3	Clap
263	RX11 Clap 1	Clap
264	Bitcrushed Clap 1	Clap
265	Lo-Fi Clap 1	Clap
266	Lo-Fi Clap + Reverb 1	Clap
267	Slow Clap 1	Clap
268	Short Clap 1	Clap
269	Short Clap 2	Clap
270	Short Double Clap 1	Clap
271	Double Clap + Reverb 1	Clap
272	Double Clap + Reverb 2	Clap
273	Bright Clap 4	Clap
274	Clicky Clap 1	Clap
275	Long Clap + Reverb 1	Clap
276	Long Clap + Reverb 2	Clap
277	Hand Clap + Reverb 1	Clap
278	Thin Clap + Reverb 1	Clap
279	Thin Clap + Reverb 2	Clap
280	Click Clap + Reverb 1	Clap
281	Hand Clap + Reverb 2	Clap
282	Hand Clap + Reverb 3	Clap
283	Short Delay Clap 1	Clap
284	Hand Clap + Reverb 4	Clap
285	Hand Clap + Reverb 5	Clap
286	Noise Clap 1	Clap
287	Noise Clap 2	Clap
288	Glitch Clap 1	Clap
289	Glitch Clap 2	Clap
290	Glitch Clap 3	Clap
291	Glitch Clap 4	Clap
292	Glitch Clap 5	Clap
293	Modulated Hand Clap 1	Clap
294	Woody Clap 1	Clap
295	Arabic Hand Clap 1	Clap
296	Woody Clap + Reverb 1	Clap
297	Finger Snap 1	Snap
298	Finger Snap 2	Snap
299	Finger Snap 3	Snap
300	Finger Snap 4	Snap
301	Finger Snap 5	Snap
302	Finger Snap 6	Snap
303	Wide Snap 1	Snap
304	Wide Snap 2	Snap

No.	Name	Category
305	Fat Snap 1	Snap
306	Fat Snap 2	Snap
307	Woody Snap 1	Snap
308	Snap + Reverb 1	Snap
309	Snap + Reverb 2	Snap
310	Click Snap 1	Snap
311	Click Snap 2	Snap
312	Tight Closed Hat 1	Closed HiHat
313	Tight Closed Hat 2	Closed HiHat
314	Tight Closed Hat 3	Closed HiHat
315	Tight Closed Hat 4	Closed HiHat
316	Tight Closed Hat 5	Closed HiHat
317	Tight Closed Hat 6	Closed HiHat
318	Tight Closed Hat 7	Closed HiHat
319	Tight Closed Hat 8	Closed HiHat
320	Tight Closed Hat 9	Closed HiHat
321	Tight Closed Hat 10	Closed HiHat
322	Tight Closed Hat 11	Closed HiHat
323	Tight Closed Hat 12	Closed HiHat
324	Closed Hat 1	Closed HiHat
325	Closed Hat 2	Closed HiHat
326	Closed Hat 3	Closed HiHat
327	Closed Hat 4	Closed HiHat
328	Closed Hat 5	Closed HiHat
329	Closed Hat 6	Closed HiHat
330	Acoustic Closed Hat 1	Closed HiHat
331	Closed Hat 7	Closed HiHat
332	Closed Hat 8	Closed HiHat
333	Closed Hat 9	Closed HiHat
334	Acoustic Closed Hat 2	Closed HiHat
335	Closed Hat 10	Closed HiHat
336	Noise Closed Hat 1	Closed HiHat
337	Noise Closed Hat 2	Closed HiHat
338	Noise Closed Hat + Low 1	Closed HiHat
339	Low Closed Hat 1	Closed HiHat
340	Closed Hat + High Tone 1	Closed HiHat
341	Acoustic Closed Hat 3	Closed HiHat
342	Acoustic Closed Hat 4	Closed HiHat
343	Acoustic Closed Hat 5	Closed HiHat
344	Acoustic Closed Hat 6	Closed HiHat
345	Acoustic Closed Hat 7	Closed HiHat
346	Acoustic Closed Hat 8	Closed HiHat
347	Acoustic Closed Hat 9	Closed HiHat
348	Acoustic Closed Hat 10	Closed HiHat

No.	Name	Category
349	Acoustic Hat Pedal 1	Closed HiHat
350	Acoustic Hat Pedal 2	Closed HiHat
351	Acoustic Hat Pedal 3	Closed HiHat
352	Acoustic Hat Pedal 4	Closed HiHat
353	Acoustic Hat Pedal 5	Closed HiHat
354	Acoustic Hat Pedal 6	Closed HiHat
355	Click Closed Hat 1	Closed HiHat
356	Lo-Fi Short Closed Hat 1	Closed HiHat
357	Click Closed Hat 2	Closed HiHat
358	Lo-Fi Short Closed Hat 2	Closed HiHat
359	Lo-Fi Short Closed Hat 3	Closed HiHat
360	Lo-Fi Short Closed Hat 4	Closed HiHat
361	Lo-Fi Short Closed Hat 5	Closed HiHat
362	Lo-Fi Short Closed Hat 6	Closed HiHat
363	Lo-Fi Short Closed Hat 7	Closed HiHat
364	Lo-Fi Short Closed Hat 8	Closed HiHat
365	Lo-Fi Short Closed Hat 9	Closed HiHat
366	Bitcrushed Hat 1	Closed HiHat
367	Lo-Fi Closed Hat 1	Closed HiHat
368	Lo-Fi Closed Hat 2	Closed HiHat
369	Lo-Fi Closed Hat 3	Closed HiHat
370	Lo-Fi Closed Hat 4	Closed HiHat
371	Lo-Fi Closed Hat 5	Closed HiHat
372	Lo-Fi Closed Hat 6	Closed HiHat
373	Lo-Fi Closed Hat 7	Closed HiHat
374	Lo-Fi Closed Hat 8	Closed HiHat
375	Lo-Fi Closed Hat 9	Closed HiHat
376	Closed Hat + Reverb 1	Closed HiHat
377	Lo-Fi Closed Hat + Reverb 1	Closed HiHat
378	Closed Hat + Reverb 2	Closed HiHat
379	Closed Hat + Reverb 3	Closed HiHat
380	Closed Hat + Reverb 4	Closed HiHat
381	Closed Hat + Reverb 5	Closed HiHat
382	Glitch Hat 1	Closed HiHat
383	Glitch Hat 2	Closed HiHat
384	Glitch Hat 3	Closed HiHat
385	Bright Open Hat 1	Open HiHat
386	Bright Open Hat 2	Open HiHat
387	Bright Open Hat 3	Open HiHat
388	Bright Open Hat 4	Open HiHat
389	Bright Open Hat 5	Open HiHat
390	Noise Open Hat 1	Open HiHat
391	Noise Open Hat 2	Open HiHat
392	Noise Open Hat 3	Open HiHat

No.	Name	Category
393	Noise Open Hat 4	Open HiHat
394	Noise Open Hat 5	Open HiHat
395	Noise Open Hat 6	Open HiHat
396	Noise Open Hat 7	Open HiHat
397	Noise Open Hat 8	Open HiHat
398	Noise Open Hat 9	Open HiHat
399	Noise Open Hat 10	Open HiHat
400	Noise Open Hat 11	Open HiHat
401	Noise Open Hat 12	Open HiHat
402	Noise Open Hat 13	Open HiHat
403	Noise Open Hat 14	Open HiHat
404	Noise Open Hat 15	Open HiHat
405	Bright Open Hat 6	Open HiHat
406	Acoustic Open Hat 1	Open HiHat
407	Acoustic Open Hat 2	Open HiHat
408	Acoustic Open Hat 3	Open HiHat
409	Acoustic Open Hat 4	Open HiHat
410	Acoustic Open Hat 5	Open HiHat
411	Acoustic Open Hat 6	Open HiHat
412	Acoustic Open Hat 7	Open HiHat
413	Crash Open Hat 1	Open HiHat
414	Crash Open Hat 2	Open HiHat
415	Crash Open Hat 3	Open HiHat
416	Bitcrushed Open Hat 1	Open HiHat
417	Bitcrushed Open Hat 2	Open HiHat
418	Bitcrushed Open Hat 3	Open HiHat
419	Bitcrushed Open Hat 4	Open HiHat
420	Distorted Open Hat 1	Open HiHat
421	Distorted Open Hat 2	Open HiHat
422	Distorted Open Hat 3	Open HiHat
423	Distorted Open Hat 4	Open HiHat
424	Distorted Open Hat 5	Open HiHat
425	Lo-Fi Open Hat 1	Open HiHat
426	Lo-Fi Open Hat 2	Open HiHat
427	Lo-Fi Open Hat 3	Open HiHat
428	Lo-Fi Open Hat 4	Open HiHat
429	Lo-Fi Open Hat 5	Open HiHat
430	Gated Open Hat 1	Open HiHat
431	Gated Open Hat 2	Open HiHat
432	Gated Open Hat 3	Open HiHat
433	Gated Open Hat 4	Open HiHat
434	Gated Open Hat 5	Open HiHat
435	Slow Attack Open Hat 1	Open HiHat
436	Slow Attack Open Hat 2	Open HiHat



## Sound List

No.	Name	Category
437	Slow Attack Open Hat 3	Open HiHat
438	Slow Attack Open Hat 4	Open HiHat
439	Slow Attack Open Hat 5	Open HiHat
440	Slow Attack Open Hat 6	Open HiHat
441	Slow Attack Open Hat 7	Open HiHat
442	Open Hat with Bell 1	Open HiHat
443	Open Hat with Bell 2	Open HiHat
444	Open Hat with Bell 3	Open HiHat
445	Bell Open Hat 1	Open HiHat
446	Splash Open Hat 1	Open HiHat
447	Open Hat + Delay 1	Open HiHat
448	Open Hat + Reverb 1	Open HiHat
449	Open Hat + Reverb 2	Open HiHat
450	Panning Open Hat 1	Open HiHat
451	Panning Distorted Open Hat 1	Open HiHat
452	Modulated Open Hat 1	Open HiHat
453	Modulated Open Hat 2	Open HiHat
454	Modulated Open Hat 3	Open HiHat
455	Reversed Floor Hat 1	Open HiHat
456	Reversed Hat 1	Open HiHat
457	Shaker 1	Shaker / Tambourine
458	Shaker 2	Shaker / Tambourine
459	Shaker 3	Shaker / Tambourine
460	Shaker 4	Shaker / Tambourine
461	Shaker 5	Shaker / Tambourine
462	Shaker 6	Shaker / Tambourine
463	Shaker 7	Shaker / Tambourine
464	Shaker 8	Shaker / Tambourine
465	Shaker 9	Shaker / Tambourine
466	Shaker 10	Shaker / Tambourine
467	Shaker 11	Shaker / Tambourine
468	Short Shaker Accent 1	Shaker / Tambourine
469	Short Shaker Accent 2	Shaker / Tambourine
470	Short Shaker Accent 3	Shaker / Tambourine
471	Shaker + Reverb 1	Shaker / Tambourine
472	Shaker + Reverb 2	Shaker / Tambourine
473	Short Shaker Accent 4	Shaker / Tambourine
474	Shaker 12	Shaker / Tambourine
475	Shaker 13	Shaker / Tambourine
476	Shaker 14	Shaker / Tambourine
477	Shaker 15	Shaker / Tambourine
478	Arabic Maracas 1	Shaker / Tambourine
479	Caxixi 1	Shaker / Tambourine
480	Afoxe Open 1	Shaker / Tambourine

No.	Name	Category
481	Muffled Shaker 1	Shaker / Tambourine
482	Tambourine 1	Shaker / Tambourine
483	Tambourine 2	Shaker / Tambourine
484	Tambourine 3	Shaker / Tambourine
485	Tambourine 4	Shaker / Tambourine
486	Tambourine 5	Shaker / Tambourine
487	Tambourine 6	Shaker / Tambourine
488	Tambourine 7	Shaker / Tambourine
489	Short Tambourine 1	Shaker / Tambourine
490	Tambourine 8	Shaker / Tambourine
491	RX5 Tambourine 1	Shaker / Tambourine
492	Long Tambourine 1	Shaker / Tambourine
493	Long Tambourine 2	Shaker / Tambourine
494	Long Tambourine 3	Shaker / Tambourine
495	Long Tambourine 4	Shaker / Tambourine
496	Long Tambourine 5	Shaker / Tambourine
497	Tambourine + Reverb 1	Shaker / Tambourine
498	Sharp Ride 1	Ride
499	Sharp Ride 2	Ride
500	Noise Ride 1	Ride
501	Sharp Ride 3	Ride
502	Acoustic Ride 1	Ride
503	Acoustic Ride - Brush 1	Ride
504	Acoustic Ride 2	Ride
505	Acoustic Ride 3	Ride
506	RX7 Ride 1	Ride
507	Ride Cup 1	Ride
508	Ride Cup 2	Ride
509	RX5 Ride Cup 1	Ride
510	Color Ride 1	Ride
511	Color Ride 2	Ride
512	Color Ride 3	Ride
513	Color Ride 4	Ride
514	Color Ride 5	Ride
515	Gate Ride 1	Ride
516	Crash Ride 1	Ride
517	Crash Ride 2	Ride
518	Crash Ride 3	Ride
519	Noise Ride 2	Ride
520	Noise Long Ride 1	Ride
521	High Noise Ride 1	Ride
522	Synth Ride 1	Ride
523	Synth Long Ride 1	Ride
524	Dark Ride 1	Ride

Sound List

No.	Name	Category
525	Slow Ride 1	Ride
526	Noise Ride 3	Ride
527	Bitcrushed Ride 1	Ride
528	RX5 Crash 1	Crash
529	Acoustic Crash 1	Crash
530	Acoustic Crash 2	Crash
531	Acoustic Crash + Reverb 1	Crash
532	Acoustic Crash 3	Crash
533	Slow Acoustic Crash 1	Crash
534	Acoustic Crash 4	Crash
535	Acoustic Crash 5	Crash
536	Splash Cymbal 1	Crash
537	Splash Cymbal 2	Crash
538	Splash Cymbal + Reverb 1	Crash
539	Big Cymbal 1	Crash
540	Big Cymbal 2	Crash
541	Big Cymbal 3	Crash
542	Cymbal Hammer 1	Crash
543	China Cymbal 1	Crash
544	4th Delay Crash 1	Crash
545	Long Crash + Reverb 1	Crash
546	Noise Crash 1	Crash
547	Noise Crash 2	Crash
548	Noise Crash 3	Crash
549	Acoustic High Tom 1	Tom
550	Acoustic High Tom 2	Tom
551	Acoustic Mid Tom 1	Tom
552	Acoustic Mid Tom 2	Tom
553	Acoustic Mid Tom 3	Tom
554	Acoustic Mid Tom 4	Tom
555	Acoustic Low Tom 1	Tom
556	Acoustic Low Tom 2	Tom
557	Punchy High Tom 1	Tom
558	Punchy High Tom 2	Tom
559	Punchy High Tom 3	Tom
560	Punchy Mid Tom 1	Tom
561	Punchy Mid Tom 2	Tom
562	Punchy Mid Tom 3	Tom
563	Punchy Mid Tom 4	Tom
564	Punchy Mid Tom 5	Tom
565	Punchy Mid Tom 6	Tom
566	Punchy Low Tom 1	Tom
567	Punchy Low Tom 2	Tom
568	Punchy Low Tom 3	Tom

No.	Name	Category
569	Electronic High Tom 1	Tom
570	Electronic High Tom 2	Tom
571	Electronic High Tom 3	Tom
572	Electronic High Tom 4	Tom
573	Electronic High Tom 5	Tom
574	Electronic Mid Tom 1	Tom
575	Electronic Mid Tom 2	Tom
576	Electronic Low Tom 1	Tom
577	Electronic Low Tom 2	Tom
578	RX5 High Tom 1	Tom
579	RX5 Mid Tom 1	Tom
580	RX5 Mid Tom 2	Tom
581	RX5 Low Tom 1	Tom
582	Acoustic High Tom - Oak 1	Tom
583	Acoustic Mid Tom - Oak 1	Tom
584	Acoustic Low Tom - Oak 1	Tom
585	Acoustic High Tom - Jazz 1	Tom
586	Acoustic Mid Tom - Jazz 1	Tom
587	Acoustic Low Tom - Jazz 1	Tom
588	Acoustic High Tom - Rock 1	Tom
589	Acoustic Mid Tom - Rock 1	Tom
590	Acoustic Low Tom - Rock 1	Tom
591	Acoustic High Tom - Maple 1	Tom
592	Acoustic Mid Tom - Maple 1	Tom
593	Acoustic Low Tom - Maple 1	Tom
594	Electronic High Tom + Reverb 1	Tom
595	Muffled Mid Tom + Reverb 1	Tom
596	Acoustic Mid Tom + Reverb 1	Tom
597	Modulated Tom 1	Tom
598	Modulated Tom 2	Tom
599	Modulated Tom 3	Tom
600	RX5 High Tom 2	Tom
601	RX5 Mid Tom 3	Tom
602	RX5 Mid Tom 4	Tom
603	RX5 Low Tom 2	Tom
604	Distorted Tom 1	Tom
605	Distorted Tom 2	Tom
606	Distorted Tom 3	Tom
607	Distorted Tom 4	Tom
608	Distorted Tom 5	Tom
609	Distorted Tom 6	Tom
610	Distorted Tom 7	Tom
611	Bitcrushed Tom 1	Tom
612	Bitcrushed Tom 2	Tom

Sound List

No.	Name	Category
613	Bass Tom 1	Tom
614	Bass Tom 2	Tom
615	Tonal Bass Tom 1	Tom
616	Bass Tom 3	Tom
617	Bass Tom 4	Tom
618	Bass Tom 5	Tom
619	Analog Cowbell 1	Bell
620	Analog Cowbell Accent 1	Bell
621	Tonal Cowbell 1	Bell
622	Tonal Cowbell 2	Bell
623	Metallic Cowbell 1	Bell
624	Metallic Cowbell 2	Bell
625	Metallic Cowbell 3	Bell
626	Cowbell High 1	Bell
627	Cowbell 1	Bell
628	Cowbell Mid 1	Bell
629	Cowbell Mid 2	Bell
630	Agogo High 1	Bell
631	Agogo Low 1	Bell
632	Small Bell 1	Bell
633	Short Bell 1	Bell
634	Short Bell 2	Bell
635	Tingsha Bell 1	Bell
636	Ringling Bell 1	Bell
637	Muted Finger Cymbal 1	Bell
638	Muted Finger Cymbal 2	Bell
639	Sagat1 Open 1	Bell
640	Sagat1 Close 1	Bell
641	Sagat2 Open 1	Bell
642	Sagat2 Close 1	Bell
643	Sagat3 Open 1	Bell
644	Sagat3 Close 1	Bell
645	Atarigane 1	Bell
646	High Bell 1	Bell
647	Mind Bell 1	Bell
648	Sci-Fi Bell 1	Bell
649	Bell and Noise 1	Bell
650	Modulated Bell 1	Bell
651	RX5 Conga High Open 1	Conga / Bongo
652	RX5 Conga High Mute 1	Conga / Bongo
653	RX5 Conga Low Open 1	Conga / Bongo
654	Conga1 High Slap 1	Conga / Bongo
655	Conga1 High Slap Open 1	Conga / Bongo
656	Conga1 High Open 1	Conga / Bongo

No.	Name	Category
657	Conga1 Low Open 1	Conga / Bongo
658	Conga2 High 1	Conga / Bongo
659	Conga2 Mid 1	Conga / Bongo
660	Conga2 Mid Mute 1	Conga / Bongo
661	Conga3 High Mute 1	Conga / Bongo
662	Conga3 Mid Slap Open 1	Conga / Bongo
663	Khalg Conga Low	Conga / Bongo
664	Analog Conga High 1	Conga / Bongo
665	Analog Conga Mid 1	Conga / Bongo
666	Analog Conga Low 1	Conga / Bongo
667	RX5 Bongo High 1	Conga / Bongo
668	RX5 Bongo Low 1	Conga / Bongo
669	Bongo1 High Open 1	Conga / Bongo
670	Bongo1 Low Open 1	Conga / Bongo
671	Bongo2 High 1	Conga / Bongo
672	Bongo3 High 1	Conga / Bongo
673	Bongo3 High 2	Conga / Bongo
674	Bongo4 High 1	Conga / Bongo
675	Bongo4 Low 1	Conga / Bongo
676	Bongo4 Low 2	Conga / Bongo
677	Djembe 1	World
678	Djembe 2	World
679	Djembe 3	World
680	Djembe 4	World
681	Talking Drum 1	World
682	Talking Drum 2	World
683	Talking Drum 3	World
684	Talking Drum 4	World
685	Tamborim Up 1	World
686	Tamborim Down 1	World
687	Tamborim Finger Back 1	World
688	Tamborim Open 1	World
689	Pandeiro Open 1	World
690	Pandeiro Close 1	World
691	Reco-reco 1	World
692	Surdo Mute 1	World
693	Surdo Stop 1	World
694	Surdo Open 1	World
695	Surdo Mute 2	World
696	Surdo Stick 1	World
697	Caixa Rim 1	World
698	Vibraslap 1	World
699	Darbuka Dum 1	World
700	Darbuka Dom & Tak 1	World

No.	Name	Category
701	Darbuka Tak Finger 1	World
702	Darbuka Tak Close 1	World
703	Darbuka Slap 1	World
704	Darbuka Sak 1	World
705	Darbuka Rak 1	World
706	Darbuka Flam 1	World
707	Darbuka Noise 1	World
708	Tunisian Bendir Dom 1	World
709	Tunisian Bendir Tak 1	World
710	Tunisian Bendir Tak 2	World
711	Moroccan Bendir Dom 1	World
712	Moroccan Bendir Dom 2	World
713	Moroccan Bendir Dom 3	World
714	Moroccan Bendir Edge 1	World
715	Moroccan Tamtam 1	World
716	Algerian Bendir Deza 1	World
717	Algerian Bendir Kaf 1	World
718	Algerian Galal Daza 1	World
719	Riq Dum Open 1	World
720	Riq Tek Open 1	World
721	Riq Teke Open 1	World
722	Riq Sak 1	World
723	Riq Snouj Close 1	World
724	Hollo Finger 1	World
725	Bass Darbuka Dum 1	World
726	Bass Darbuka Tek 1	World
727	Bendir Tek 1	World
728	Bendir Slap 1	World
729	Bendir Large 1	World
730	Merjaf Group Dom 1	World
731	Merjaf Group Sak 1	World
732	Zeer Dom 1	World
733	Zeer Tak 1	World
734	Merwas Group Dom 1	World
735	Merwas Group Tak 1	World
736	Medando Dom 1	World
737	Medando Sak 1	World
738	Sigal Marad Dom 1	World
739	Sigal Marad Tak 1	World
740	Doholla Dom 1	World
741	Doholla Sak 1	World
742	Katem Med Dom Open 1	World
743	Katem Med Tak 1	World
744	Katem Med Sak 1	World

No.	Name	Category
745	Taar Barashim Dom 1	World
746	Taar Barashim Shake 1	World
747	Req Sak 1	World
748	Req Dom 1	World
749	Req Open 1	World
750	Req Sajat 1	World
751	Udho Back 1	World
752	Udho Chap Body 1	World
753	Jahla Group Dom 1	World
754	Iranian Bendir Tom 1	World
755	Iranian Bendir Chap 1	World
756	Iranian Bendir Back 1	World
757	Tombak Tom 1	World
758	Tombak Slap 1	World
759	Tombak Chap 1	World
760	Tombak Flam & Back 1	World
761	Tempo Chap 1	World
762	Tabla Dom 1	World
763	Tabla Tak 1	World
764	Tabla Sak 1	World
765	Tabla 1	World
766	Tabla 2	World
767	Tabla 3	World
768	Tabla 4	World
769	Tabla 5	World
770	Mridangam 1	World
771	Mridangam 2	World
772	Japanese Wa Taiko 1	World
773	Japanese Oo Taiko 1	World
774	Japanese Yagura Taiko 1	World
775	Japanese Shime Taiko 1	World
776	Japanese Tsuzumi 1	World
777	Timbale 1	World
778	Timbale 2	World
779	Cajon 1	World
780	Cajon 2	World
781	Claves 1	World
782	Wood Block 1	World
783	Bones 1	World
784	Bones 2	World
785	Bones 3	World
786	Bones Triplet 1	World
787	Spoons 1	World
788	Laser - Falling 1	SFX

Sound List

No.	Name	Category
789	Sci-Fi - Detected 1	SFX
790	Sci-Fi - Drip 1	SFX
791	Sci-Fi - Buzzed 1	SFX
792	Laser - Falling 2	SFX
793	Sci-Fi - Repeated 1	SFX
794	Laser - Blast 1	SFX
795	Laser - Scratch 1	SFX
796	Fade In Noise 1	SFX
797	Low Noise 1	SFX
798	Gritty Noise 1	SFX
799	Ambient Noise 1	SFX
800	Ambient Percussion 1	SFX
801	Ambient Percussion 2	SFX
802	Ambient Percussion 3	SFX
803	Ambient Percussion 4	SFX
804	Ambient Percussion 5	SFX
805	Ambient Percussion 6	SFX
806	Percussion + Water 1	SFX
807	Percussion + Water 2	SFX
808	Percussion + Water 3	SFX
809	Glass Crash 1	SFX
810	Glass Broken 1	SFX
811	Percussion + Glass Broken 1	SFX
812	Glass Broken + Reverb 1	SFX
813	Percussion + Glass Broken 2	SFX
814	Foley Sound 1	SFX
815	Foley Sound 2	SFX
816	Foley Sound 3	SFX
817	Foley Sound 4	SFX
818	Foley Sound 5	SFX
819	Foley Sound 6	SFX
820	Foley Sound 7	SFX
821	Foley Sound 8	SFX
822	Camera Shutter 1	SFX
823	Camera Shutter 2	SFX
824	Camera Shutter 3	SFX
825	Old Clock Tick 1	SFX
826	Telephone 1	SFX
827	Gunshot 1	SFX
828	Bomb 1	SFX
829	Scanning 1	SFX
830	SFX High Bell 1	SFX
831	SFX Pitched Tone 1	SFX
832	Muffled Pitched Percussion 1	SFX

No.	Name	Category
833	Sine Percussion 1	SFX
834	Water Tone 1	SFX
835	Mid Resonated Tone 1	SFX
836	Mid Resonated Tone 2	SFX
837	Wood + Reverb 1	SFX
838	Pitched SFX 1	SFX
839	Trash Can 1	SFX
840	Distorted Pitched Noise 1	SFX
841	Dark Hit 1	SFX
842	Percussion Hit 1	SFX
843	Percussion Hit 2	SFX
844	Percussion Hit 3	SFX
845	Percussion Hit 4	SFX
846	Gritty Hit 1	SFX
847	Gritty Hit 2	SFX
848	Panning Gritty Hit 1	SFX
849	Punchy Gritty Hit 1	SFX
850	Industrial Hit 1	SFX
851	Industrial Hit 2	SFX
852	Industrial Hit 3	SFX
853	Industrial Hit 4	SFX
854	Industrial Hit 5	SFX
855	Industrial Hit 6	SFX

## Synth Sound

No.	Name	Category
856	Rn Bass	Bass
857	Buzz Bass	Bass
858	Acid3	Bass
859	Bass Morpher	Bass
860	3 VCOs	Bass
861	Brain Bass	Bass
862	Lo Boy	Bass
863	Dark Bass	Bass
864	Fundamental	Bass
865	Fat Sine Resonance	Bass
866	Moon Bass	Bass
867	More Fatty	Bass
868	Chill Out Bass	Bass
869	Growler	Bass
870	Smacked	Bass
871	booooooooooom	Bass
872	Biting	Bass
873	Boogie A Legato	Bass
874	Uni Punch	Bass
875	Noise Bass	Bass
876	Single Oscillator	Bass
877	Unison	Bass
878	Long Spit	Bass
879	Big Bass	Bass
880	Bass & Comp!	Bass
881	Rave Blade	Bass
882	Plastic Bass	Bass
883	Funky Resonance	Bass
884	Phat Three	Bass
885	Needle Bass	Bass
886	Acidd	Bass
887	Boom Bass	Bass
888	West Coast	Bass
889	Wazzo	Bass
890	Fast PWM Bass	Bass
891	Bass Pedal	Bass
892	Oxide	Bass
893	Bowngo	Bass
894	Wide Synth Bass	Bass
895	Dry Synth Bass	Bass
896	Kick Bass Legato	Bass
897	Keep Dancin'	Bass

No.	Name	Category
898	Velo Master	Bass
899	Wah Bass	Bass
900	Pulse Step	Bass
901	Phat Step	Bass
902	Octave Analog	Bass
903	Sync Bass	Bass
904	Sync Big	Bass
905	Puncher	Bass
906	Dark Comp	Bass
907	Simple Bass	Bass
908	Fat Sine	Bass
909	Kompressor	Bass
910	Dark Uni	Bass
911	Fight Bass	Bass
912	Byon Bass	Bass
913	One Voice	Bass
914	Pro-Attack	Bass
915	Bobby Bass	Bass
916	Trance Bass	Bass
917	Short SequenceBass	Bass
918	Lately	Bass
919	Faaat Pulse	Bass
920	Short PWM Bass	Bass
921	Hyper Velocity	Bass
922	Deep Point	Bass
923	Pulse Stop	Bass
924	Oh Bee Bass	Bass
925	Booming Bass	Bass
926	Army Bass	Bass
927	Punchy Drone	Bass
928	Dee Tune	Bass
929	Chorus Pulse	Bass
930	Sweeper	Bass
931	Synth Bass 1	Bass
932	Synth Bass 2	Bass
933	Universal	Bass
934	Analog Bullet Bass	Bass
935	Analog Perc Bass	Bass
936	Analog Step Bass	Bass
937	Upright	Bass
938	Prec Flat Wound	Bass
939	Round Wound	Bass

Sound List

No.	Name	Category
940	Mid Range Finger	Bass
941	Pick Open	Bass
942	Pick Mute	Bass
943	Slap Switch	Bass
944	Fretless Dry	Bass
945	Fretless Solo	Bass
946	Dist Tama Bass	Bass
947	5th Fuzz Bass	Bass
948	Hybrid Bass 1	Bass
949	Hybrid Bass 2	Bass
950	House Organ Bass	Bass
951	Slow Saw Lead	Synth Lead
952	Darker Things Drone	Synth Lead
953	Analog Saw Dub	Synth Lead
954	Percussive Dance 1	Synth Lead
955	Multi Saw DA	Synth Lead
956	Dance Synth DA	Synth Lead
957	Percussive Dance 2	Synth Lead
958	Percussive Dance 2 [Chord]	Synth Lead
959	Power Hook	Synth Lead
960	Dance Survivor	Synth Lead
961	P5 Resonance Comp	Synth Lead
962	P5 Analog Punch	Synth Lead
963	P5 Analog Punch [Chord]	Synth Lead
964	Saw Lead	Synth Lead
965	Cool Trance	Synth Lead
966	>Attack<	Synth Lead
967	Club Finger	Synth Lead
968	Wobbly	Synth Lead
969	Wobbly [Chord]	Synth Lead
970	Ana Dayz	Synth Lead
971	Airy Nylon	Synth Lead
972	Progressive Attack	Synth Lead
973	Oracle	Synth Lead
974	Big Comp	Synth Lead
975	Big Comp [Chord]	Synth Lead
976	Rezz Punch	Synth Lead
977	Resonant Clavi	Synth Lead
978	Straight	Synth Lead
979	Straight [Chord]	Synth Lead
980	Psych Noise	Synth Lead
981	SquiffyMisbehaving	Synth Lead
982	Lektro Codes	Synth Lead
983	Lektro Codes [Chord]	Synth Lead

No.	Name	Category
984	Hard FM Keyboard	Synth Lead
985	W Phaser	Synth Lead
986	DPCM Attack	Synth Lead
987	Talk	Synth Lead
988	Digy SEQ	Synth Lead
989	Nerve Nasty	Synth Lead
990	Ring Zplus	Synth Lead
991	Trance Attack	Synth Lead
992	Trance Attack [Chord]	Synth Lead
993	Tekno Attack	Synth Lead
994	PWM Percussion	Synth Lead
995	Stabby	Synth Lead
996	Detroit Stab	Synth Lead
997	Corrado	Synth Lead
998	Synthetique	Synth Lead
999	Noiz Rezz	Synth Lead
1000	Tuxedo	Synth Lead
1001	Queens	Synth Lead
1002	Hip Voice	Synth Lead
1003	GX1	Synth Lead
1004	GX1 [Chord]	Synth Lead
1005	Night Watch	Synth Lead
1006	Pluck Bells	Synth Lead
1007	Power Dance Chords	Synth Lead
1008	Hyper Trance	Synth Lead
1009	Cosmic Psyche	Synth Lead
1010	Brightness	Synth Lead
1011	Brightness [Chord]	Synth Lead
1012	Calliope Lead	Synth Lead
1013	Voice Lead	Synth Lead
1014	Chiff Lead	Synth Lead
1015	Charan Lead	Synth Lead
1016	Fifth Lead	Synth Lead
1017	Bass & Lead	Synth Lead
1018	PWM Stabs	Synth Lead
1019	Queen of Pop	Synth Lead
1020	EDM Talker	Synth Lead
1021	Huge Lead	Synth Lead
1022	Bleep Lead	Synth Lead
1023	Detuned Vintage	Synth Lead
1024	Space Lead	Synth Lead
1025	Square Lead	Synth Lead
1026	Dual Square Lead	Synth Lead
1027	Dual Square Lead [Chord]	Synth Lead

Sound List

No.	Name	Category
1028	Vintage Sync	Synth Lead
1029	Dirty Hook	Synth Lead
1030	Nu Mini	Synth Lead
1031	ProgressiveRk Lead	Synth Lead
1032	Lucky	Synth Lead
1033	Opening	Synth Lead
1034	Rap Lead 1	Synth Lead
1035	Mini Soft	Synth Lead
1036	Feeling	Synth Lead
1037	Early Lead	Synth Lead
1038	Funky Pulse	Synth Lead
1039	Mr. Finger	Synth Lead
1040	Singleline	Synth Lead
1041	Soft RnB	Synth Lead
1042	Wind Synth	Synth Lead
1043	Broken Sine	Synth Lead
1044	Broken Sine [Chord]	Synth Lead
1045	Duck Lead	Synth Lead
1046	In da Night	Synth Lead
1047	Mayday	Synth Lead
1048	On D Line	Synth Lead
1049	Early Soloist	Synth Lead
1050	Heterodyne	Synth Lead
1051	Classic 5th	Synth Lead
1052	Vintage Saw	Synth Lead
1053	Mini Three	Synth Lead
1054	Phat Dino	Synth Lead
1055	Dynamic Mini	Synth Lead
1056	PWM Lead	Synth Lead
1057	PWM Lead [Chord]	Synth Lead
1058	Pulse Wound	Synth Lead
1059	Think Sync	Synth Lead
1060	Punch Lead	Synth Lead
1061	Bright Saw	Synth Lead
1062	Troy	Synth Lead
1063	Wood Panel	Synth Lead
1064	Push Ahead	Synth Lead
1065	Eight	Synth Lead
1066	Sync Power	Synth Lead
1067	Glisten Lead	Synth Lead
1068	Big Drone	Synth Lead
1069	Screameemy	Synth Lead
1070	Flange Filter	Synth Lead
1071	Sutra	Synth Lead

No.	Name	Category
1072	Free LFO	Synth Lead
1073	Rap Lead 2	Synth Lead
1074	Space Power Lead	Synth Lead
1075	Nyquist	Synth Lead
1076	Digimetal	Synth Lead
1077	Saw Destroy	Synth Lead
1078	Vinalog Saw	Synth Lead
1079	Mady SQU	Synth Lead
1080	Low Undulation	Synth Lead
1081	Impact	Synth Lead
1082	Talk Mod	Synth Lead
1083	Digital Gangsta	Synth Lead
1084	Plastic Squeeze	Synth Lead
1085	Pinz Lead	Synth Lead
1086	Dancy Saw Lead	Synth Lead
1087	Buzz Around	Synth Lead
1088	Xtreme Wheel	Synth Lead
1089	Supertrance	Synth Lead
1090	Supertrance [Chord]	Synth Lead
1091	Poly Hook	Synth Lead
1092	HPF Dance	Synth Lead
1093	Tekk Glide	Synth Lead
1094	Growl Tekk	Synth Lead
1095	Plucked Chordz	Synth Lead
1096	Chordz	Synth Lead
1097	Cool Body	Synth Lead
1098	Twist Sync	Synth Lead
1099	TEKIE	Synth Lead
1100	Sonix	Synth Lead
1101	Big SkidHookLead 1	Synth Lead
1102	Big SkidHookLead 2	Synth Lead
1103	Full Concert Grand	Piano
1104	Concert GrandPiano	Piano
1105	Rock Grand Piano	Piano
1106	Rock Grand Piano [Chord]	Piano
1107	Rock Brite Piano	Piano
1108	Mellow Grand Piano	Piano
1109	Hall Mellow Grand	Piano
1110	Hall Mellow Grand [Chord]	Piano
1111	Glasgow	Piano
1112	Romantic Piano	Piano
1113	Aggressive Grand	Piano
1114	Tacky	Piano
1115	House Piano	Piano



Sound List

No.	Name	Category
1116	CP80 Layer	Piano
1117	CP80	Piano
1118	CP80 [Chord]	Piano
1119	CP80 Amp	Piano
1120	CP80 Chorus	Piano
1121	CP 1979	Piano
1122	CP70 Chorus	Piano
1123	Journey	Piano
1124	CP 2007	Piano
1125	Old and Squashed	Piano
1126	Ballad Key	Piano
1127	80s Layer	Piano
1128	Ballad Stack	Piano
1129	Piano Back	Piano
1130	Monaural Grand	Piano
1131	Old Blues	Piano
1132	Old Blues [Chord]	Piano
1133	1968	Piano
1134	Honkytonk	Piano
1135	E.Piano 1	Keyboard
1136	Soft Case	Keyboard
1137	Soft Case [Chord]	Keyboard
1138	74 Phase	Keyboard
1139	Vintage'74	Keyboard
1140	R&B Soft	Keyboard
1141	Early 70's	Keyboard
1142	Crunchy Comp	Keyboard
1143	Vintage Case	Keyboard
1144	Hard Vintage	Keyboard
1145	Sweetness	Keyboard
1146	Phaser Vintage	Keyboard
1147	Vintage Phase	Keyboard
1148	Early Fusion	Keyboard
1149	Neo Soul	Keyboard
1150	1983	Keyboard
1151	1983 [Chord]	Keyboard
1152	Contempo	Keyboard
1153	Clicky Dyno	Keyboard
1154	Dyno Straight	Keyboard
1155	Dyno Chorus	Keyboard
1156	80s Boosted	Keyboard
1157	80s Boosted [Chord]	Keyboard
1158	Chorus Hard	Keyboard
1159	Max Tine	Keyboard

No.	Name	Category
1160	Bell Chorus	Keyboard
1161	Drive EP	Keyboard
1162	Vinyl EP	Keyboard
1163	Natural Wr	Keyboard
1164	Natural Wr [Chord]	Keyboard
1165	Wr EP Bright	Keyboard
1166	Wr Distortion	Keyboard
1167	Phaze Wr	Keyboard
1168	E.Piano 2	Keyboard
1169	DX Legend	Keyboard
1170	Bell DX	Keyboard
1171	DX Woody	Keyboard
1172	DX Woody [Chord]	Keyboard
1173	Full Tine	Keyboard
1174	DX Mellow	Keyboard
1175	DX Crisp	Keyboard
1176	DX Celesta EP	Keyboard
1177	DX Pluck EP	Keyboard
1178	DX-7 II	Keyboard
1179	GS Tines	Keyboard
1180	Galaxy DX	Keyboard
1181	TX816 Bell Piano	Keyboard
1182	Marimba DX	Keyboard
1183	DX5-Zero	Keyboard
1184	Hybrid EP	Keyboard
1185	Mixed Up	Keyboard
1186	Dyno Wr	Keyboard
1187	Analog Piano	Keyboard
1188	AhrAml	Keyboard
1189	Electro Piano	Keyboard
1190	Transistor Piano	Keyboard
1191	EP Pad	Keyboard
1192	DX Pad	Keyboard
1193	Grace EP	Keyboard
1194	Nu Touch Clavi	Keyboard
1195	Super Clavi 1	Keyboard
1196	PhaserClavi Mt	Keyboard
1197	Vintage Clavi	Keyboard
1198	Super Clavi 2	Keyboard
1199	Stereo Clavi	Keyboard
1200	Hollow Clavi	Keyboard
1201	Nu Phasing	Keyboard
1202	Touch Clavi	Keyboard
1203	Wah Clavi	Keyboard

Sound List

No.	Name	Category
1204	Pulse Clavi	Keyboard
1205	Brite Clavi	Keyboard
1206	Clavi Bril Treble	Keyboard
1207	Clavi Bril Treble [Chord]	Keyboard
1208	Clavi Amped	Keyboard
1209	Clavi Phaser	Keyboard
1210	Clavi Wah	Keyboard
1211	Harpsichord	Keyboard
1212	NaturalHarpsichord	Keyboard
1213	Octave Harpsichord	Keyboard
1214	E.Harpsichord	Keyboard
1215	16 + 8 + 5&1/3	Organ
1216	First 3 w/Perc	Organ
1217	Slow Jam	Organ
1218	Cool Cat	Organ
1219	Jazzy 1	Organ
1220	Jazzy 1 [Chord]	Organ
1221	Jazzy 2	Organ
1222	Jazzy Chorus	Organ
1223	Draw Organ	Organ
1224	Percussive Organ	Organ
1225	Rock Organ	Organ
1226	On Road	Organ
1227	Progressy	Organ
1228	Rocky	Organ
1229	Crunchy	Organ
1230	Glassy	Organ
1231	Clean	Organ
1232	Vib Chorus	Organ
1233	Soulemn	Organ
1234	Mellow	Organ
1235	Fully	Organ
1236	FullDraw/CVibrato	Organ
1237	Even Out	Organ
1238	A Few Wheels	Organ
1239	A Few Wheels [Chord]	Organ
1240	Left Manual	Organ
1241	Draw Control	Organ
1242	Clean Noise	Organ
1243	Walking Bass	Organ
1244	Greasy	Organ
1245	Swishie	Organ
1246	Solo Percussion	Organ
1247	Percussion Vibrato	Organ

No.	Name	Category
1248	Tiny Combo Bars 1	Organ
1249	Tiny Combo Bars 1 [Chord]	Organ
1250	Tiny Combo Bars 2	Organ
1251	Panther	Organ
1252	1967 Keyboard	Organ
1253	YD-45C	Organ
1254	Surf Rock	Organ
1255	Early Bird	Organ
1256	Vx Full Bars	Organ
1257	Vx Dark Bars	Organ
1258	Fr All Tabs	Organ
1259	Fr String Tabs	Organ
1260	Vx Full Bars Amped	Organ
1261	Vx Surf Organ	Organ
1262	Moet	Organ
1263	Bollinger	Organ
1264	Vinyl Organ	Organ
1265	Alternator	Organ
1266	Tradi	Organ
1267	Petit	Organ
1268	Petit [Chord]	Organ
1269	Fluty	Organ
1270	Fluty Pipe	Organ
1271	St. Peter	Organ
1272	St. Paul	Organ
1273	Impromptu	Organ
1274	Mixture	Organ
1275	Reed Split	Organ
1276	Medieval	Organ
1277	Medieval [Chord]	Organ
1278	Breath Pipe	Organ
1279	Reedy Pipe	Organ
1280	Sunday	Organ
1281	Church Organ	Organ
1282	Church Organ [Chord]	Organ
1283	Reed Organ	Organ
1284	Accordion	Organ
1285	Accordions	Organ
1286	Accordions [Chord]	Organ
1287	Tango Accordion 1	Organ
1288	Tango Accordion 2	Organ
1289	Master Accordion	Organ
1290	Round Saw Phase	Pad
1291	Ducker Cloud	Pad

Sound List

No.	Name	Category
1292	Multi Saw Pad	Pad
1293	Poly Synth Pad	Pad
1294	Poly Pad DA	Pad
1295	HyperTrance Stereo	Pad
1296	Ethereal	Pad
1297	Ethereal [Chord]	Pad
1298	Saw Pad	Pad
1299	Dark ModulationPad	Pad
1300	Dark Light	Pad
1301	Ambient Synth Pad	Pad
1302	5th Lite	Pad
1303	Smooth BPF Sweep	Pad
1304	Trance	Pad
1305	Xtreme Sweep	Pad
1306	Warm Pad	Pad
1307	Nu Warm Pad	Pad
1308	Nu Warm Pad [Chord]	Pad
1309	5th Atmosphere	Pad
1310	Dim	Pad
1311	Simple Air	Pad
1312	Nature Sine	Pad
1313	Nature Sine [Chord]	Pad
1314	Analog	Pad
1315	Perc Pad	Pad
1316	Dark Atmo Pad	Pad
1317	Dark Atmo Pad [Chord]	Pad
1318	Dark Organ Pad	Pad
1319	Soft Brassy	Pad
1320	Road to Nowhere	Pad
1321	Analog Sweep	Pad
1322	Sweep Pad	Pad
1323	Sweep Strings	Pad
1324	Brass Motion Pad	Pad
1325	Luminous	Pad
1326	Mother Ship	Pad
1327	Warm Backing Pad	Pad
1328	Feather	Pad
1329	Feather [Chord]	Pad
1330	Pan Sphere	Pad
1331	Square	Pad
1332	Shaper	Pad
1333	Early Digital	Pad
1334	Dramana	Pad
1335	Dream Shift	Pad

No.	Name	Category
1336	Dream Shift [Chord]	Pad
1337	Sound Track	Pad
1338	Remote Space	Pad
1339	Fathoms	Pad
1340	Mother Earth	Pad
1341	Landing Pad	Pad
1342	The Breath	Pad
1343	Feather Pad	Pad
1344	Slow Attack Pad	Pad
1345	Hi Brite	Pad
1346	Pad & Syn	Pad
1347	Pad & Syn [Chord]	Pad
1348	Cosmic Swell Pad	Pad
1349	Sweet Flange	Pad
1350	Waterfall	Pad
1351	Phase Pad	Pad
1352	Pure Synth	Pad
1353	Pure Synth + Delay	Pad
1354	Pearls	Pad
1355	Flange Wall	Pad
1356	Tornado	Pad
1357	Ice Rink	Pad
1358	Bell Pad	Pad
1359	Bell Pad [Chord]	Pad
1360	New Age Pad	Pad
1361	Paradise	Pad
1362	Yellow River	Pad
1363	Love Me	Pad
1364	Frozen Pad	Pad
1365	Bowed Pad	Pad
1366	Metal Pad	Pad
1367	Pensive	Pad
1368	Sci-Fi	Pad
1369	Atmosphere	Pad
1370	Halo Pad	Pad
1371	Space Vocals	Pad
1372	Haah Pad	Pad
1373	Oooh Pad	Pad
1374	Oooh Pad [Chord]	Pad
1375	Back in Itopian	Pad
1376	Strings & Choir	Pad
1377	Angel Eyes	Pad
1378	Glass Choir	Pad
1379	Nativity	Pad

Sound List

No.	Name	Category
1380	Seraphim	Pad
1381	Aah Choir	Pad
1382	Ooh Choir	Pad
1383	Syn Voice	Pad
1384	Choir Pad	Pad
1385	Mellow Swell	Pad
1386	Frozen Glasspad	Pad
1387	Lunar Eclipse	Pad
1388	Prayer Call	Pad
1389	Granular Motion	Pad
1390	Mysterious Invention	Pad
1391	Gate of Eden	Pad
1392	Whispering Ghosts	Pad
1393	NighttrainToMunich	Pad
1394	Morning Dew	Pad
1395	Calling Mr. Reso	Pad
1396	2 SwitchesToHeaven	Pad
1397	SEKAI-ISAN	Pad
1398	Setsunai	Pad
1399	Week End	Pad
1400	TiRiPAD	Pad
1401	Cluster	Pad
1402	Xtreme Rezz	Pad
1403	My Reality	Pad
1404	Magnetics	Pad
1405	Sand	Pad
1406	Felicity	Pad
1407	Vibrancy	Pad
1408	Radio Venus	Pad
1409	Elec Blue	Pad
1410	Chyo Ethno	Pad
1411	konjoh BEAM	Pad
1412	Blizzard	Pad
1413	SINGING BOWL	Pad
1414	Metalvox Pad	Pad
1415	Refraction	Pad
1416	Philanger	Pad
1417	Ellipsotron	Pad
1418	Envelope	Pad
1419	Whatsis	Pad
1420	Pearl Collection	Pad
1421	Four Dimensions	Pad
1422	Hallucination	Pad
1423	Electraid	Pad

No.	Name	Category
1424	Clearing	Pad
1425	Long HiPa	Pad
1426	Quad Swell	Pad
1427	New Stab	Pad
1428	Vinyl Hit	Pad
1429	Hit Me	Pad
1430	Ambient Bite	Pad
1431	Bollog Puls	Pad
1432	Orchestra Hit	Pad
1433	Rain Pad	Pad
1434	Goblin	Pad
1435	Echoes	Pad
1436	Dripping Quarks	Pad
1437	Metallic Airstabs	Pad
1438	Descendant	Pad
1439	Violin	Strings
1440	Violin Solo	Strings
1441	Viola	Strings
1442	Viola Solo 1	Strings
1443	Viola Solo 2	Strings
1444	Cello Solo	Strings
1445	Cello Duo	Strings
1446	ContrabassSolo1	Strings
1447	ContrabassSolo2	Strings
1448	Quartet	Strings
1449	Small Section	Strings
1450	Small Ensemble	Strings
1451	Small Ensemble [Chord]	Strings
1452	Almighty	Strings
1453	Medium Section	Strings
1454	Medium Hall	Strings
1455	Quick Bows	Strings
1456	Large Section	Strings
1457	Strings Section 1	Strings
1458	Strings Section 2	Strings
1459	Octave Ensemble	Strings
1460	Full Chamber	Strings
1461	Stryngs	Strings
1462	Stryngs [Chord]	Strings
1463	Dynamic Bow	Strings
1464	Pizzicato	Strings
1465	SymphonicPizzicato	Strings
1466	Plucky Pizzicato	Strings
1467	Octave Pizzas	Strings

Sound List

No.	Name	Category
1468	Tremolo Strings 1	Strings
1469	Tremolo Strings 2	Strings
1470	Tremolo Strs Small	Strings
1471	Spicato Large	Strings
1472	Spicato Large [Chord]	Strings
1473	Disco	Strings
1474	Lush	Strings
1475	Back Ground	Strings
1476	Warm Back	Strings
1477	Stringy	Strings
1478	Big Strings	Strings
1479	F.Horn + Strings	Strings
1480	Wood Winds+Strings	Strings
1481	Synth Strings 1	Strings
1482	Synth Strings 2	Strings
1483	Gleaming Pad	Strings
1484	Fat PWM Synth Vel	Strings
1485	VintagePolyStrings	Strings
1486	PWM Strings	Strings
1487	PWM Strings [Chord]	Strings
1488	Mourn Strings	Strings
1489	VP Soft	Strings
1490	PWM Simple	Strings
1491	Glassy Rezonant	Strings
1492	Superstrings	Strings
1493	Light Pad	Strings
1494	Noble Pad	Strings
1495	Warm Big	Strings
1496	Sentimental	Strings
1497	Analog Strings	Strings
1498	Analog Ensemble	Strings
1499	Phase Strings	Strings
1500	Octave Strings	Strings
1501	80s Clean Strings	Strings
1502	3 Oscillators Vin	Strings
1503	Silver Strings	Strings
1504	Silver Strings [Chord]	Strings
1505	String Machine	Strings
1506	3 Octave Strings	Strings
1507	TranceIntroduction	Strings
1508	Mystic Trance	Strings
1509	Electric Violin	Strings
1510	Tron Violin	Strings
1511	Tron Strings	Strings

No.	Name	Category
1512	Tape Strings	Strings
1513	Orchestronic	Strings
1514	Vinyltron	Strings
1515	Beauty Harp	Strings
1516	Stereo Harp	Strings
1517	Trumpet	Brass
1518	Tp Romantic Legato	Brass
1519	Classical Trumpet	Brass
1520	Bright Trumpet	Brass
1521	Tp SoftJazz Legato	Brass
1522	SoftTrumpetLegato	Brass
1523	Trumpet Vibrato	Brass
1524	Trumpet Shake Vel	Brass
1525	Legend Mute	Brass
1526	Flugelhorn	Brass
1527	Jazzy Flugel	Brass
1528	Trumpet Section	Brass
1529	Trumpet Section [Chord]	Brass
1530	Trombone	Brass
1531	Blown Bone Legato	Brass
1532	Bright Trombone	Brass
1533	NewOrleansTrombone	Brass
1534	French Horn	Brass
1535	French Horn Solo	Brass
1536	Tuba	Brass
1537	BassTuba(Bb)	Brass
1538	Euphonium	Brass
1539	FrenchHornSection1	Brass
1540	FrenchHornSection2	Brass
1541	French Horns	Brass
1542	F.Horn + Trombone	Brass
1543	F.Hrn+Trombone+Trp	Brass
1544	Orchestra Brass	Brass
1545	Orchestra Brass [Chord]	Brass
1546	Movie Horns	Brass
1547	Symphonic	Brass
1548	Smooth Brass	Brass
1549	Soft Brass mp-mf	Brass
1550	Dynamic Brass	Brass
1551	Accent mf-fall	Brass
1552	Small BrassSection	Brass
1553	MediumBrassSection	Brass
1554	Lots O' Brass	Brass
1555	Bright Section	Brass

Sound List

No.	Name	Category
1556	Power Section	Brass
1557	Shiny Brass	Brass
1558	Big Brass	Brass
1559	Sforzando	Brass
1560	Soft Brass & Sax	Brass
1561	Big Band	Brass
1562	Sax Big Band	Brass
1563	Velo Falls	Brass
1564	Hybrid Section	Brass
1565	Hybrid Bright	Brass
1566	Hybrid Brass Swell	Brass
1567	The Synth Brass	Brass
1568	T Brass	Brass
1569	Lo-fi	Brass
1570	Quiet Brass	Brass
1571	Big Syn	Brass
1572	Thinth	Brass
1573	XP Brass Stereo	Brass
1574	Simple Saw Brass	Brass
1575	Brassy	Brass
1576	Kustom	Brass
1577	After 1984	Brass
1578	After 1984 [Chord]	Brass
1579	Finale	Brass
1580	Huge CS80	Brass
1581	CS-90	Brass
1582	Oh Bee Soft	Brass
1583	Oh Bee Horns	Brass
1584	Slow PWM Brass	Brass
1585	Soft 5th Brass	Brass
1586	Synth Brass 1	Brass
1587	Synth Brass 2	Brass
1588	Oh Bee Syncomp	Brass
1589	Tacky Brass	Brass
1590	Soprano Sax	Woodwind
1591	Soprano Legato	Woodwind
1592	Soprano Soft	Woodwind
1593	Mellow Soprano	Woodwind
1594	Alto Sax	Woodwind
1595	Alto Vib Legato	Woodwind
1596	Alto Legato	Woodwind
1597	Alto	Woodwind
1598	Alto Accent Legato	Woodwind
1599	Tenor Sax	Woodwind

No.	Name	Category
1600	Tenor Dynamic	Woodwind
1601	Tenor Soft Legato	Woodwind
1602	Velo Growl Legato	Woodwind
1603	Tenor Max	Woodwind
1604	SoftTenorSaxLegato	Woodwind
1605	Baritone Sax	Woodwind
1606	Baritone	Woodwind
1607	Hip Bari	Woodwind
1608	Tenor Section	Woodwind
1609	Sax Octave Section	Woodwind
1610	Mixed Sax Section	Woodwind
1611	Piccolo	Woodwind
1612	Piccolo Legato	Woodwind
1613	Flute	Woodwind
1614	Flute Legato	Woodwind
1615	Sweet Flute	Woodwind
1616	Wood Flute	Woodwind
1617	Tron Flute	Woodwind
1618	Flootz	Woodwind
1619	2 Flutes	Woodwind
1620	Oboe	Woodwind
1621	Sweet Oboe Legato	Woodwind
1622	Oboe Soft Legato	Woodwind
1623	Clarinet	Woodwind
1624	Jazzy Cla Legato	Woodwind
1625	Bassoon 1	Woodwind
1626	Bassoon 2	Woodwind
1627	English Horn	Woodwind
1628	Flute & Clari	Woodwind
1629	2 Oboes & Bassoon	Woodwind
1630	Woodwindind Quartet	Woodwind
1631	Harmonica	Woodwind
1632	Gentle Harp	Woodwind
1633	Woody Harp	Woodwind
1634	Bluz Distort	Woodwind
1635	Campfire	Woodwind
1636	Irish Pipe Legato	Woodwind
1637	Recorder	Woodwind
1638	Pan Flute	Woodwind
1639	Shakuhachi	Woodwind
1640	Whistle	Woodwind
1641	Ocarina	Woodwind
1642	Bagpipe	Woodwind
1643	Classical	Guitar

Sound List

No.	Name	Category
1644	High Tension	Guitar
1645	Sao Paulo	Guitar
1646	Barcelona	Guitar
1647	Barcelona [Chord]	Guitar
1648	Nylon Slide Vel	Guitar
1649	NylonHarmonics Vel	Guitar
1650	Classical12Strings	Guitar
1651	Hip-HopNylonGuitar	Guitar
1652	Old Strings	Guitar
1653	Mute & Slide Vel	Guitar
1654	SteelHarmonics Vel	Guitar
1655	Hip-HopSteelGuitar	Guitar
1656	Hi Strings	Guitar
1657	Two Acoustics	Guitar
1658	2 Steel Strings	Guitar
1659	Airy 12	Guitar
1660	Airy 12 [Chord]	Guitar
1661	Wide 12 strings	Guitar
1662	12Strings Mono	Guitar
1663	Clean El & Ac	Guitar
1664	Jazzy Pick	Guitar
1665	Melodic Jazz	Guitar
1666	Touch Wah	Guitar
1667	Baby	Guitar
1668	Good Night	Guitar
1669	Dynamic Clean	Guitar
1670	Single Coil Chorus	Guitar
1671	Single Coil Chorus [Chord]	Guitar
1672	1coil Clean	Guitar
1673	1coil Amped Vel	Guitar
1674	Distant	Guitar
1675	Some Hair	Guitar
1676	Hit It Hard	Guitar
1677	Paddy Clean	Guitar
1678	Dual Coil '65	Guitar
1679	Dual Coil '65 [Chord]	Guitar
1680	Dual Coil Amp	Guitar
1681	Roto Guitar	Guitar
1682	Dual Coil SlideVel	Guitar
1683	Dual Coil Slap Vel	Guitar
1684	Dual Coil 80sClean	Guitar
1685	DualCoil80sCleanMt	Guitar
1686	DualCoil80sCleanMt [Chord]	Guitar
1687	Mute Guitar	Guitar

No.	Name	Category
1688	HIP Mute	Guitar
1689	Dual Coil Rotary	Guitar
1690	Electric 12Strings	Guitar
1691	Rotator	Guitar
1692	Middy Tremolo	Guitar
1693	Retro Flanger	Guitar
1694	Vintage Strum	Guitar
1695	Vintage1coilChorus	Guitar
1696	Spanky	Guitar
1697	Rockabilly	Guitar
1698	Surfin' 60s 1coil	Guitar
1699	Pedal Steel	Guitar
1700	2 Electrics	Guitar
1701	Light Blues	Guitar
1702	DualCoil SemiClean	Guitar
1703	Breakback Mountain	Guitar
1704	Chorus Dist	Guitar
1705	Tex Boogie	Guitar
1706	Tex Boogie [Chord]	Guitar
1707	59 Combo	Guitar
1708	Alternative Rocker	Guitar
1709	Grunged Up	Guitar
1710	Overdrive Mt&Harmo	Guitar
1711	Crunched Up 376	Guitar
1712	Dynamic Amp	Guitar
1713	Chuggin' Guitar	Guitar
1714	Chugga	Guitar
1715	Small Amp	Guitar
1716	Small Amp [Chord]	Guitar
1717	Metal Mute	Guitar
1718	DistortionMt&Harmo	Guitar
1719	Cool Drive	Guitar
1720	Hard Drive	Guitar
1721	Hard Ramp	Guitar
1722	Heavy Drive	Guitar
1723	No.1 Guitar	Guitar
1724	No.1 Guitar [Chord]	Guitar
1725	Snake Finger	Guitar
1726	Dual Coil BlueLead	Guitar
1727	Voodoooman	Guitar
1728	Killer Whammy	Guitar
1729	Latin Lover	Guitar
1730	Oct Fuzz Wah	Guitar
1731	Dual Coil Lead Wah	Guitar

Sound List

No.	Name	Category
1732	Crunchy Guitar	Guitar
1733	Beater	Guitar
1734	Mid Drive	Guitar
1735	Hard Rocker	Guitar
1736	Tough Tube	Guitar
1737	Drive Wah	Guitar
1738	Guitar Harmonics	Guitar
1739	Sitar 1	World
1740	Sitar 2	World
1741	Sitar 3	World
1742	Tambura	World
1743	Banjo 1	World
1744	Banjo 2	World
1745	Shamisen	World
1746	Koto	World
1747	Baglama	World
1748	Saz Feeze	World
1749	Kanun	World
1750	Kotoun	World
1751	Bouzuki	World
1752	Where Am I?	World
1753	Sakura	World
1754	Nomad	World
1755	Nomad [Chord]	World
1756	Pluk-o-dy	World
1757	Kalimba	World
1758	Mbira	World
1759	Glass Mbira	World
1760	Fiddle	World
1761	Kemence	World
1762	Kemen Wet	World
1763	Yayli	World
1764	Kawala	World
1765	Ney	World
1766	Zurna	World
1767	Pungi	World
1768	Snake Charmer	World
1769	Shehnai 1	World
1770	Shehnai 2	World
1771	Mythic Flute	World
1772	Didgeridoo	World
1773	Kodo	World
1774	Xylophone	Mallet
1775	Orch Xylophone	Mallet

No.	Name	Category
1776	Marimba	Mallet
1777	Orch Marimba	Mallet
1778	Soft Marimba	Mallet
1779	Glocken	Mallet
1780	Orch Glockenspiel	Mallet
1781	Vibraphone	Mallet
1782	Vibraphone Soft	Mallet
1783	Vibes	Mallet
1784	Vibes [Chord]	Mallet
1785	Vibes Bow	Mallet
1786	Celesta	Mallet
1787	Ethnic Dream	Mallet
1788	Orc Percussion	Mallet
1789	Real Timpani	Mallet
1790	Timpani + Cymbal	Mallet
1791	Steel Drum	Mallet
1792	Synth Steel Drum	Mallet
1793	Dulcimer	Mallet
1794	Metallic Bell	Bell
1795	Twinkle	Bell
1796	Stick Bell	Bell
1797	Ice Bells	Bell
1798	Ice Bells [Chord]	Bell
1799	Bell Ice	Bell
1800	Stack Bell	Bell
1801	J-Pop	Bell
1802	Crystal	Bell
1803	Chorus Bell	Bell
1804	Handbell	Bell
1805	Bell Chiff	Bell
1806	Bell Chiff [Chord]	Bell
1807	Sako Bell	Bell
1808	Nice Bell	Bell
1809	Noisy Bell	Bell
1810	Pop Bells & Pad	Bell
1811	Pop Bells & Pad [Chord]	Bell
1812	Digibox	Bell
1813	Nibelungen	Bell
1814	Wood Bell	Bell
1815	Marimbell	Bell
1816	Gamelan	Bell
1817	Mystic Bowl	Bell
1818	Island Bell	Bell
1819	Tibetan	Bell



Sound List

No.	Name	Category
1820	Tibetan [Chord]	Bell
1821	Rimba Bells	Bell
1822	Lost in Asia	Bell
1823	Music Box	Bell
1824	Tinkle Bell	Bell
1825	Tubular Bells 1	Bell
1826	Tubular Bells 2	Bell
1827	Timp/Bell/Glocken	Bell
1828	Bass Morpher [Arp]	Rhythmic
1829	Fat Sine Resonance [Arp]	Rhythmic
1830	Boogie A Legato [Arp]	Rhythmic
1831	Long Spit [Arp]	Rhythmic
1832	Acidd [Arp]	Rhythmic
1833	West Coast [Arp]	Rhythmic
1834	Keep Dancin' [Arp]	Rhythmic
1835	Phat Step [Arp]	Rhythmic
1836	Short SequenceBass [Arp]	Rhythmic
1837	Upright [Arp]	Rhythmic
1838	Slap Switch [Arp]	Rhythmic
1839	Multi Saw DA [Arp]	Rhythmic
1840	Saw Lead [Arp]	Rhythmic
1841	Airy Nylon [Arp]	Rhythmic
1842	Rezz Punch [Arp]	Rhythmic
1843	W Phaser [Arp]	Rhythmic
1844	Noiz Rezz [Arp]	Rhythmic
1845	Hip Voice [Arp]	Rhythmic
1846	Hyper Trance [Arp]	Rhythmic
1847	EDM Talker [Arp]	Rhythmic
1848	Space Lead [Arp]	Rhythmic
1849	Square Lead [Arp]	Rhythmic
1850	ProgressiveRk Lead [Arp]	Rhythmic
1851	Opening [Arp]	Rhythmic
1852	Feeling [Arp]	Rhythmic
1853	Mini Three [Arp]	Rhythmic
1854	Nyquist [Arp]	Rhythmic
1855	HPF Dance [Arp]	Rhythmic
1856	Glasgow [Arp]	Rhythmic
1857	House Piano [Arp]	Rhythmic
1858	Vintage Case [Arp]	Rhythmic
1859	Bell Chorus [Arp]	Rhythmic
1860	PhaserClavi Mt [Arp]	Rhythmic
1861	Marimba DX [Arp]	Rhythmic
1862	Rocky [Arp]	Rhythmic
1863	Crunchy [Arp]	Rhythmic

No.	Name	Category
1864	Walking Bass [Arp]	Rhythmic
1865	Accordion [Arp]	Rhythmic
1866	Perc Pad [Arp]	Rhythmic
1867	Almighty [Arp]	Rhythmic
1868	SymphonicPizzicato [Arp]	Rhythmic
1869	Noble Pad [Arp]	Rhythmic
1870	Trumpet [Arp]	Rhythmic
1871	MediumBrassSection [Arp]	Rhythmic
1872	Finale [Arp]	Rhythmic
1873	Alto [Arp]	Rhythmic
1874	Sao Paulo [Arp]	Rhythmic
1875	Hip-HopNylonGuitar [Arp]	Rhythmic
1876	Hip-HopSteelGuitar [Arp]	Rhythmic
1877	Wide 12 strings [Arp]	Rhythmic
1878	Baby [Arp]	Rhythmic
1879	Dual Coil Amp [Arp]	Rhythmic
1880	HIP Mute [Arp]	Rhythmic
1881	Chorus Dist [Arp]	Rhythmic
1882	Dynamic Amp [Arp]	Rhythmic
1883	DistortionMt&Harmo [Arp]	Rhythmic
1884	Heavy Drive [Arp]	Rhythmic
1885	Banjo 2 [Arp]	Rhythmic
1886	Sakura [Arp]	Rhythmic
1887	Orch Xylophone [Arp]	Rhythmic
1888	Celesta [Arp]	Rhythmic
1889	J-Pop [Arp]	Rhythmic
1890	Nibelungen [Arp]	Rhythmic
1891	Lost in Asia [Arp]	Rhythmic
1892	Blaster Beam	SFX
1893	InsideTheWormhole	SFX
1894	Men In Yellow	SFX
1895	Metamorphosis	SFX
1896	Perplex	SFX
1897	Outer Planet	SFX
1898	Industrial	SFX
1899	Space Walking	SFX
1900	Scraper	SFX
1901	SE 02 <Zero Two>	SFX
1902	Talking Machines	SFX
1903	Tobi Mage	SFX
1904	Bitzz	SFX
1905	Toda	SFX
1906	Auto Trapeze	SFX
1907	Harpist'sNightmare	SFX

No.	Name	Category
1908	Find Newgt!	SFX
1909	Nile River	SFX
1910	New Age Atmo	SFX
1911	Wind Blows	SFX
1912	Fire!	SFX
1913	Scratching Machine	SFX
1914	Goa Psyche	SFX
1915	WaitForBadWeather	SFX
1916	Reverse The Audio	SFX
1917	Radio Static	SFX
1918	Surveillance	SFX
1919	Noise FX	SFX
1920	Sample&HoldVintage	SFX
1921	Lazerzz	SFX
1922	On The Fritz	SFX
1923	Argentina	SFX
1924	Reverse Cymbal	SFX
1925	Fret Noise	SFX
1926	Breath Noiz	SFX
1927	Seashore	SFX
1928	Tweet	SFX
1929	Telephone 2	SFX
1930	Helicopter 1	SFX
1931	Applause	SFX
1932	Gunshot 2	SFX

## DX Sound

No.	Name	Category
1933	FM Lo-Fi Bass	Bass
1934	FM Up Bass	Bass
1935	FM Ducking Bass	Bass
1936	FM Amp Sub	Bass
1937	FM Decay Bass	Bass
1938	Wobble Bass	Bass
1939	FM Dark Bass	Bass
1940	Beep Bass	Bass
1941	Feel It	Bass
1942	Attack Bass	Bass
1943	FM Jet Bass	Bass
1944	FM Bold Bass	Bass
1945	FM Metal Dissonant	Bass
1946	FM Metallic Lead	Synth Lead
1947	FM Square and 5th Saw	Synth Lead
1948	Dyna Lead	Synth Lead
1949	Mo Dem Lead	Synth Lead
1950	Bit Tune	Synth Lead
1951	Bleep Clv	Synth Lead
1952	Uni Lead	Synth Lead
1953	FM Chorus 5th Lead	Synth Lead
1954	FM Square Module	Synth Lead
1955	FM Lil Dist Airy	Synth Lead
1956	FM Ring Lead	Synth Lead
1957	FM Pan Trem Lead	Synth Lead
1958	FM Saw Bright	Synth Lead
1959	FM Crush Computer	Synth Lead
1960	FM Simple Piano	Piano
1961	FM B Piano	Piano
1962	FM B Piano [Chord]	Piano
1963	FM Clavi Piano	Piano
1964	Legend EP	Keyboard
1965	Legend EP [Chord]	Keyboard
1966	Wood EP	Keyboard
1967	Wood EP [Chord]	Keyboard
1968	Wood EP Tremolo	Keyboard
1969	Crystal EP	Keyboard
1970	FM Chorus Jazz EP	Keyboard
1971	FM Clear EP	Keyboard
1972	DigiChord	Keyboard
1973	Cheez Organ	Organ
1974	FM Rotate Organ	Organ

No.	Name	Category
1975	FM Pipe A	Organ
1976	FM 5th Atmosphere	Pad
1977	FM Glass Dream	Pad
1978	FM Glass Dream [Chord]	Pad
1979	Motion Pad	Pad
1980	Begin Sweep	Pad
1981	Cloud Pad	Pad
1982	Sol Phase	Pad
1983	Flying Kode	Pad
1984	AlTi Pad	Pad
1985	Star Pad	Pad
1986	FM Warm Pad	Pad
1987	FM Warm Pad [Chord]	Pad
1988	FM Glass Harp	Pad
1989	FM Slow Phaser Pad	Pad
1990	FM Ambient Pad	Pad
1991	FM Strings Pad	Pad
1992	FM Strings	Strings
1993	FM Cold Strings	Strings
1994	FM Soft Brass	Brass
1995	FM Digital Brass	Brass
1996	FM Brass	Brass
1997	FM Hit Brass	Brass
1998	FM Hit Brass [Chord]	Brass
1999	FM Fun Brass	Brass
2000	FM Chorus Flute	Woodwind
2001	FM Sax	Woodwind
2002	FM Chorus Guitar	Guitar
2003	FM Chorus Guitar [Chord]	Guitar
2004	FM Wah Guitar	Guitar
2005	FM Dist Guitar	Guitar
2006	Ambi Pluck	Guitar
2007	FM Koto	World
2008	FM Shamisen	World
2009	FM Sitar	World
2010	FM Echo Mallet	Mallet
2011	Tin Perc	Mallet
2012	FM Marimba	Mallet
2013	FM Tubular Bells	Bell
2014	FM Tubular Bells [Chord]	Bell
2015	Future Bell	Bell
2016	FM Decay Bass [Arp]	Rhythmic

No.	Name	Category
2017	FM Dark Bass [Arp]	Rhythmic
2018	Mo Dem Lead [Arp]	Rhythmic
2019	Bit Tune [Arp]	Rhythmic
2020	Uni Lead [Arp]	Rhythmic
2021	FM Simple Piano [Arp]	Rhythmic
2022	Legend EP [Arp]	Rhythmic
2023	Wood EP [Arp]	Rhythmic
2024	Star Pad [Arp]	Rhythmic
2025	FM Brass [Arp]	Rhythmic
2026	Ambi Pluck [Arp]	Rhythmic
2027	FM Echo Mallet [Arp]	Rhythmic
2028	Tin Perc [Arp]	Rhythmic
2029	FM Marimba [Arp]	Rhythmic
2030	D'n Beats	SFX
2031	Buzz Siren	SFX
2032	Chopper	SFX

**SAMPLER Sound**

No.	Name	Category
1	Female Count 1	Vocal Count
2	Female Count 2	Vocal Count
3	Female Count 3	Vocal Count
4	Female Count 4	Vocal Count
5	Female Count 5	Vocal Count
6	Female Count 6	Vocal Count
7	Female Count 7	Vocal Count
8	Female Count 8	Vocal Count
9	Male Count 1 A	Vocal Count
10	Male Count 2 A	Vocal Count
11	Male Count 3 A	Vocal Count
12	Male Count 4 A	Vocal Count
13	Male Count 5 A	Vocal Count
14	Male Count 6 A	Vocal Count
15	Male Count 7 A	Vocal Count
16	Male Count 8 A	Vocal Count
17	Male Count 1 B	Vocal Count
18	Male Count 2 B	Vocal Count
19	Male Count 3 B	Vocal Count
20	Male Count 4 B	Vocal Count
21	Male Count 5 B	Vocal Count
22	Male Count 6 B	Vocal Count
23	Male Count 7 B	Vocal Count
24	Male Count 8 B	Vocal Count
25	Female Vocal - Ha	Vocal Phrase / Chant
26	Female Vocal - Yo	Vocal Phrase / Chant
27	Female Vocal - Hey	Vocal Phrase / Chant
28	Female Vocal - Oh	Vocal Phrase / Chant
29	Female Vocal - Money	Vocal Phrase / Chant
30	Female Vocal - Go	Vocal Phrase / Chant
31	Male Vocal - Yo	Vocal Phrase / Chant
32	Male Vocal - Oh	Vocal Phrase / Chant
33	Male Vocal - Uh 1	Vocal Phrase / Chant
34	Male Vocal - Go	Vocal Phrase / Chant
35	Male Vocal- Whooh	Vocal Phrase / Chant
36	Male Vocal - Hey	Vocal Phrase / Chant
37	Male Vocal - OK	Vocal Phrase / Chant
38	Male Vocal - Say What	Vocal Phrase / Chant
39	Male Vocal - Big Up	Vocal Phrase / Chant
40	Male Vocal - Let's Go	Vocal Phrase / Chant
41	Male Vocal - Hey - Loud	Vocal Phrase / Chant
42	Male Vocal - Ooh - Loud	Vocal Phrase / Chant

No.	Name	Category
43	Male Vocal - Wow - Loud	Vocal Phrase / Chant
44	Male Vocal - Bon	Vocal Phrase / Chant
45	Male Vocal - Get Funky	Vocal Phrase / Chant
46	Male Vocal - Ow	Vocal Phrase / Chant
47	Male Vocal - Uh 2	Vocal Phrase / Chant
48	Group Vocal - Ah uh	Vocal Phrase / Chant
49	Group Vocal - Hey	Vocal Phrase / Chant
50	Group Vocal - R U Ready?	Vocal Phrase / Chant
51	Group Vocal - Check It Out	Vocal Phrase / Chant
52	Group Vocal - Come On	Vocal Phrase / Chant
53	Group Vocal - Here We Go	Vocal Phrase / Chant
54	Group Vocal - Ho ho	Vocal Phrase / Chant
55	Group Vocal- Ho ho uh uh	Vocal Phrase / Chant
56	Group Vocal - Wussup	Vocal Phrase / Chant
57	Group Vocal - You You You	Vocal Phrase / Chant
58	Japanese Chant 1	Vocal Phrase / Chant
59	Japanese Chant 2	Vocal Phrase / Chant
60	Japanese Chant 3	Vocal Phrase / Chant
61	Japanese Chant 4	Vocal Phrase / Chant
62	Japanese Chant 5	Vocal Phrase / Chant
63	Japanese Chant 6	Vocal Phrase / Chant
64	Japanese Chant 7	Vocal Phrase / Chant
65	Japanese Chant 8	Vocal Phrase / Chant
66	Japanese Chant 9	Vocal Phrase / Chant
67	Japanese Chant 10	Vocal Phrase / Chant
68	Japanese Chant 11	Vocal Phrase / Chant
69	Japanese Chant 12	Vocal Phrase / Chant
70	Japanese Chant 13	Vocal Phrase / Chant
71	Japanese Chant 14	Vocal Phrase / Chant
72	Japanese Chant 15	Vocal Phrase / Chant
73	Japanese Chant 16	Vocal Phrase / Chant
74	Japanese Chant 17	Vocal Phrase / Chant
75	Japanese Chant 18	Vocal Phrase / Chant
76	Singing - Female - Ah 1	Singing Vocal
77	Singing - Female - Ah 2	Singing Vocal
78	Singing - Female - Ai	Singing Vocal
79	Singing - Female - La ah ah	Singing Vocal
80	Singing - Female - Woo la	Singing Vocal
81	Singing - Female - Aw oh	Singing Vocal
82	Singing - Female - Ha ah 1	Singing Vocal
83	Singing - Female - Haaaah	Singing Vocal
84	Singing - Male - Ah ah	Singing Vocal

Sound List

No.	Name	Category
85	Singing - Male - Oh oh woo	Singing Vocal
86	Singing - Male - La a a a	Singing Vocal
87	Singing - Male - Ah	Singing Vocal
88	Singing - Male - Hooo	Singing Vocal
89	Singing - Male - Hee	Singing Vocal
90	Singing - Male - Uu	Singing Vocal
91	Singing - Male - Everyday	Singing Vocal
92	Singing - Male - Every Night	Singing Vocal
93	Singing - Male - Yeeaaah	Singing Vocal
94	Singing - Male - Oh wo	Singing Vocal
95	Singing - Male - Oh wowo ah	Singing Vocal
96	Singing - Male - Yeah ah ah	Singing Vocal
97	Singing - Female - Ha ah 2	Singing Vocal
98	Singing - Female - La la la la la	Singing Vocal
99	High pitched vocal - Ah	Robotic Vocal / Effect
100	High pitched vocal - Top	Robotic Vocal / Effect
101	Vocoder Beat The Band	Robotic Vocal / Effect
102	Vocoder Love Is Blind	Robotic Vocal / Effect
103	Vocoder Freezing Cold	Robotic Vocal / Effect
104	Vocoder Destiny	Robotic Vocal / Effect
105	Vocoder Forbidden Dreams	Robotic Vocal / Effect
106	Vocoder Enjoying This	Robotic Vocal / Effect
107	Vocoder Desperation	Robotic Vocal / Effect
108	Vocoder Born Happy	Robotic Vocal / Effect
109	Vocoder Day Life	Robotic Vocal / Effect
110	Vocoder Reality	Robotic Vocal / Effect
111	Vocoder Dreamin Of U	Robotic Vocal / Effect
112	Vocoder Complicated	Robotic Vocal / Effect
113	Vocoder Mystery	Robotic Vocal / Effect
114	Vocoder Revolution	Robotic Vocal / Effect
115	Vocoder Sweeping	Robotic Vocal / Effect
116	Vocoder Yesterday	Robotic Vocal / Effect
117	Vocoder Close Eyes	Robotic Vocal / Effect
118	Vocoder Infinity	Robotic Vocal / Effect
119	Vocoder Deepwater	Robotic Vocal / Effect
120	Riser - Noise 1	Riser
121	Riser - Synth Lead & Noise 1	Riser
122	Riser - Synth Lead 1	Riser
123	Riser - Bubble 1	Riser
124	Riser - Phase Synth Lead 1	Riser
125	Riser - Phase Synth Lead 2	Riser
126	Riser - Panned Synth Lead 1	Riser
127	Riser - Panned Synth Lead 2	Riser
128	Riser - Noise 2	Riser

No.	Name	Category
129	Riser - Bubble 2	Riser
130	Riser - Noise 3	Riser
131	Riser - Panned Noise 1	Riser
132	Riser - Panned Noise 2	Riser
133	Riser - Panned Noise 3	Riser
134	Riser - Panned Noise 4	Riser
135	Riser - Panned Noise 5	Riser
136	Riser - Panned Noise 6	Riser
137	Laser - Blast 2	Laser / Sci-Fi
138	Laser - Rapid Fire 1	Laser / Sci-Fi
139	Laser - Blast 3	Laser / Sci-Fi
140	Laser - Blast 4	Laser / Sci-Fi
141	Laser - Blast 5	Laser / Sci-Fi
142	Laser - Blast 6	Laser / Sci-Fi
143	Laser - Blast 7	Laser / Sci-Fi
144	Laser - Blast 8	Laser / Sci-Fi
145	Noisy Laser - Blast 1	Laser / Sci-Fi
146	Laser - Motion 1	Laser / Sci-Fi
147	Laser - Rapid Fire 2	Laser / Sci-Fi
148	Laser - Rapid Fire 3	Laser / Sci-Fi
149	Laser - Flyby 1	Laser / Sci-Fi
150	Laser - Echo 1	Laser / Sci-Fi
151	Laser - Echo 2	Laser / Sci-Fi
152	Laser - Echo 3	Laser / Sci-Fi
153	Laser - Fizzer 1	Laser / Sci-Fi
154	Laser - Vibration 1	Laser / Sci-Fi
155	Laser - Echo 4	Laser / Sci-Fi
156	Laser - Fleeting 1	Laser / Sci-Fi
157	Laser - Signal 1	Laser / Sci-Fi
158	Laser - Signal 2	Laser / Sci-Fi
159	Laser - Signal 3	Laser / Sci-Fi
160	Laser - Signal 4	Laser / Sci-Fi
161	Laser - Signal 5	Laser / Sci-Fi
162	Laser - Random Motion 1	Laser / Sci-Fi
163	Laser - Signal 6	Laser / Sci-Fi
164	Laser - Blast 9	Laser / Sci-Fi
165	Sci-Fi - Data Transmission 1	Laser / Sci-Fi
166	Sci-Fi - Data Transmission 2	Laser / Sci-Fi
167	Sci-Fi - Data Transmission 3	Laser / Sci-Fi
168	Laser - Falling 3	Laser / Sci-Fi
169	Laser - After Shock 1	Laser / Sci-Fi
170	Laser - Falling 4	Laser / Sci-Fi
171	Laser - Falling 5	Laser / Sci-Fi
172	Laser - Falling 6	Laser / Sci-Fi

Sound List

No.	Name	Category
173	Laser - Falling 7	Laser / Sci-Fi
174	Laser - Falling 8	Laser / Sci-Fi
175	Laser - Falling 9	Laser / Sci-Fi
176	Laser - Blast 10	Laser / Sci-Fi
177	Laser - Blast 11	Laser / Sci-Fi
178	Laser - Blast 12	Laser / Sci-Fi
179	Laser - Echo 5	Laser / Sci-Fi
180	Noisy Laser - Echo 1	Laser / Sci-Fi
181	Noisy Laser - Echo 2	Laser / Sci-Fi
182	Sci-Fi - Data Transmission 4	Laser / Sci-Fi
183	Laser - Falling 10	Laser / Sci-Fi
184	Laser - Falling 11	Laser / Sci-Fi
185	Laser - Falling 12	Laser / Sci-Fi
186	Laser - Signal 7	Laser / Sci-Fi
187	Sci-Fi - Rapid Fire 1	Laser / Sci-Fi
188	Sci-Fi - Detected 2	Laser / Sci-Fi
189	Sci-Fi - Access Denied 1	Laser / Sci-Fi
190	Sci-Fi - Error 1	Laser / Sci-Fi
191	Sci-Fi - Calculation 1	Laser / Sci-Fi
192	Sci-Fi - Connecting 1	Laser / Sci-Fi
193	Sci-Fi - Deep Signal 1	Laser / Sci-Fi
194	Sci-Fi - Deep Signal 2	Laser / Sci-Fi
195	Sci-Fi - Deep Dive 1	Laser / Sci-Fi
196	Sci-Fi - Deep Dive 2	Laser / Sci-Fi
197	Impact - Dark 1	Impact
198	Impact - Tom & Cymbal 1	Impact
199	Impact - Metal Hit 1	Impact
200	Impact - Metal Hit 2	Impact
201	Impact - Noise 1	Impact
202	Impact - Noise 2	Impact
203	Impact - Noise 3	Impact
204	Impact - Noise 4	Impact
205	Impact - Noise 5	Impact
206	Impact - Noise 6	Impact
207	Impact - Noise 7	Impact
208	Impact - Noise 8	Impact
209	Noise - Fade In 1	Noise / Distorted Sound
210	Noise - Fade In 2	Noise / Distorted Sound
211	Noise - Fade In 3	Noise / Distorted Sound
212	Noise - Explosion 1	Noise / Distorted Sound
213	Noise - Explosion 2	Noise / Distorted Sound
214	Noise - Explosion 3	Noise / Distorted Sound
215	Noise - Explosion 4	Noise / Distorted Sound

No.	Name	Category
216	Distorted Hit 1	Noise / Distorted Sound
217	Distorted Hit 2	Noise / Distorted Sound
218	Distorted Hit 3	Noise / Distorted Sound
219	Distorted Hit 4	Noise / Distorted Sound
220	Distorted Hit 5	Noise / Distorted Sound
221	Distorted Hit 6	Noise / Distorted Sound
222	Distorted Hit 7	Noise / Distorted Sound
223	Distorted Hit 8	Noise / Distorted Sound
224	Distorted Hit 9	Noise / Distorted Sound
225	Noise - Blast 1	Noise / Distorted Sound
226	Noise - Blast 2	Noise / Distorted Sound
227	Noise - Blast 3	Noise / Distorted Sound
228	Noise - Blast 4	Noise / Distorted Sound
229	Noise - Alert 1	Noise / Distorted Sound
230	Noise - Signal 1	Noise / Distorted Sound
231	Noise - Signal 2	Noise / Distorted Sound
232	Noise - Signal 3	Noise / Distorted Sound
233	Noise - Signal 4	Noise / Distorted Sound
234	Noise - Passing 1	Noise / Distorted Sound
235	Noise - Passing 2	Noise / Distorted Sound
236	Noise - Passing 3	Noise / Distorted Sound
237	Noise - Passing 4	Noise / Distorted Sound
238	Noise - Passing 5	Noise / Distorted Sound
239	Noise - Passing 6	Noise / Distorted Sound
240	Noise - Take Off 1	Noise / Distorted Sound
241	Noise - Take Off 2	Noise / Distorted Sound
242	Granular Noise 1	Noise / Distorted Sound
243	Ambient - Noise 1	Ambient / Soundscape
244	Ambient - Noise 2	Ambient / Soundscape
245	Ambient - Unstable 1	Ambient / Soundscape
246	Ambient - Synth bass 1	Ambient / Soundscape
247	Ambient - Unstable 2	Ambient / Soundscape
248	Ambient - Noise 3	Ambient / Soundscape
249	Ambient - Noise 4	Ambient / Soundscape
250	Ambient - Strings & Noise 1	Ambient / Soundscape
251	Ambient - Strings & Noise 2	Ambient / Soundscape
252	Ambient - Strings 1	Ambient / Soundscape
253	Ambient - Pad & Noise 1	Ambient / Soundscape
254	Ambient - Pad & Noise 2	Ambient / Soundscape
255	Samba Whistle 1	SFX

Sound List

No.	Name	Category
256	Gunshot 3	SFX
257	Helicopter 2	SFX
258	Police 1	SFX
259	Can 1	SFX
260	Cashier 1	SFX
261	Gear 1	SFX
262	Train Whistle 1	SFX
263	Train Crossing 1	SFX
264	Zipper 1	SFX
265	Tongue Clicking 1	SFX
266	Heart Beat 1	SFX
267	Water Drop 1	SFX
268	Metal Hit 1	SFX
269	Scratch 1	Scratch
270	Scratch 2	Scratch
271	Scratch 3	Scratch
272	Scratch 4	Scratch
273	Scratch 5	Scratch
274	Scratch 6	Scratch
275	Scratch 7	Scratch
276	Scratch 8	Scratch
277	Scratch 9	Scratch
278	Scratch 10	Scratch
279	Scratch 11	Scratch
280	Scratch 12	Scratch
281	Scratch 13	Scratch
282	Scratch 14	Scratch
283	Scratch 15	Scratch
284	Scratch 16	Scratch
285	Scratch 17	Scratch
286	Scratch 18	Scratch
287	Scratch 19	Scratch
288	Scratch 20	Scratch
289	Scratch 21	Scratch
290	Scratch 22	Scratch
291	Scratch 23	Scratch
292	Scratch 24	Scratch
293	Bird 1	Nature / Animals
294	Bird 2	Nature / Animals
295	Sheep 1	Nature / Animals
296	Lion 1	Nature / Animals
297	Thunder 1	Nature / Animals
298	Thunder 2	Nature / Animals
299	Rain 1	Nature / Animals

No.	Name	Category
300	Rain 2	Nature / Animals
301	Brass Hit 1	Hit / Stab / Musical Instrument Sound
302	Brass Hit 2	Hit / Stab / Musical Instrument Sound
303	Brass Hit 3	Hit / Stab / Musical Instrument Sound
304	Synth Brass Hit 1	Hit / Stab / Musical Instrument Sound
305	Synth Brass Hit 2	Hit / Stab / Musical Instrument Sound
306	Synth Brass Hit 3	Hit / Stab / Musical Instrument Sound
307	Trumpet HIT 1	Hit / Stab / Musical Instrument Sound
308	String Hit 1	Hit / Stab / Musical Instrument Sound
309	Synth Chord Hit 1	Hit / Stab / Musical Instrument Sound
310	Piano Chord Hit 1	Hit / Stab / Musical Instrument Sound
311	Piano Chord Hit 2	Hit / Stab / Musical Instrument Sound
312	Piano Chord Hit 3	Hit / Stab / Musical Instrument Sound
313	Piano Chord Hit 4	Hit / Stab / Musical Instrument Sound
314	Guitar Clean - Delay 1	Hit / Stab / Musical Instrument Sound
315	Guitar Clean - Delay 2	Hit / Stab / Musical Instrument Sound
316	Guitar Clean - Delay 3	Hit / Stab / Musical Instrument Sound
317	Guitar Mute 1	Hit / Stab / Musical Instrument Sound
318	Guitar Mute 2	Hit / Stab / Musical Instrument Sound
319	Donk Bass 1	Hit / Stab / Musical Instrument Sound
320	Bongo3 High 3	Percussion
321	Bongo3 Low 1	Percussion
322	Bongo4 High 2	Percussion
323	Bongo4 Mid 1	Percussion
324	Bongo4 Low 3	Percussion
325	Analog Conga 1	Percussion
326	Analog Conga 2	Percussion
327	Conga3 High Slap Open 1	Percussion
328	Conga3 High Open 1	Percussion
329	Conga3 High Slap Mute 1	Percussion
330	Conga3 Low Open 1	Percussion
331	Conga3 Low Mute 1	Percussion
332	Repique 1	Percussion
333	Repique Rim 1	Percussion
334	Timbale 3	Percussion
335	Tan-tan Body 1	Percussion
336	Tan-tan Close 1	Percussion
337	Tan-tan Open 1	Percussion
338	Tan-tan Slap 1	Percussion
339	Surdo Mute 3	Percussion
340	Surdo Open 2	Percussion



## Sound List

No.	Name	Category
341	Surdo Stop 2	Percussion
342	High Tom - Standard 1	Percussion
343	Mid Tom - Standard 1	Percussion
344	Low Tom - Standard 1	Percussion
345	Low Tom - Standard 2	Percussion
346	Floor Tom - Standard 1	Percussion
347	Cajon Ghost 1	Percussion
348	Cajon Low 1	Percussion
349	Analog Cowbell 2	Percussion
350	RX11 Cowbell 1	Percussion
351	Acoustic Cowbell 1	Percussion
352	Acoustic Cowbell 2	Percussion
353	Electric Wood Block 1	Percussion
354	Electric Wood Block 2	Percussion
355	Analog Claves 1	Percussion
356	Castanet 1	Percussion
357	Agogo High 2	Percussion
358	Agogo Low 2	Percussion
359	Analog Hand Clap 1	Percussion
360	Open Rim Shot 1	Percussion
361	Punchy Analog Snare 1	Percussion
362	Analog Snare 1	Percussion
363	Distorted Analog Snare 1	Percussion
364	Standard Hand Clap 1	Percussion
365	Electronic Snare 1	Percussion
366	Shaker 16	Percussion
367	Shaker 17	Percussion
368	Shaker 18	Percussion
369	Cabasa 1	Percussion
370	Cabasa 2	Percussion
371	Cabasa 3	Percussion
372	Maracas 1	Percussion
373	Shaker 19	Percussion
374	Tambourine 10	Percussion
375	Guiro 1	Percussion
376	Vibraslap 2	Percussion
377	Reco-reco 2	Percussion
378	Analog Closed Hat 1	Percussion
379	Analog Closed Hat 2	Percussion
380	Electronic Closed Hat 1	Percussion
381	Analog Open Hat 1	Percussion
382	Analog Open Hat 2	Percussion
383	Electronic Open Hat 1	Percussion
384	Ride 1	Percussion

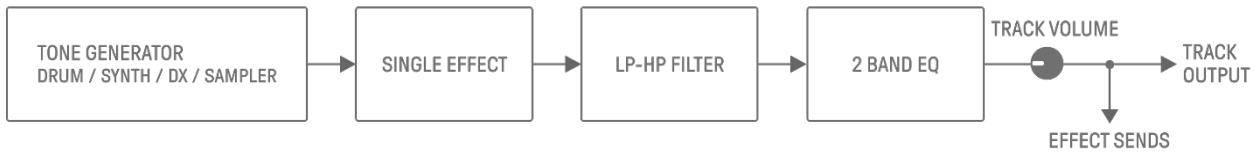
No.	Name	Category
385	Ride 2	Percussion
386	Ride 3	Percussion
387	Ride Brush 1	Percussion
388	Analog Crash 1	Percussion
389	Analog Crash 2	Percussion
390	Analog Glass 1	Percussion
391	Recorded Sample 1	Recorded Sound
392	Recorded Sample 2	Recorded Sound

## Arpeggio Preset List

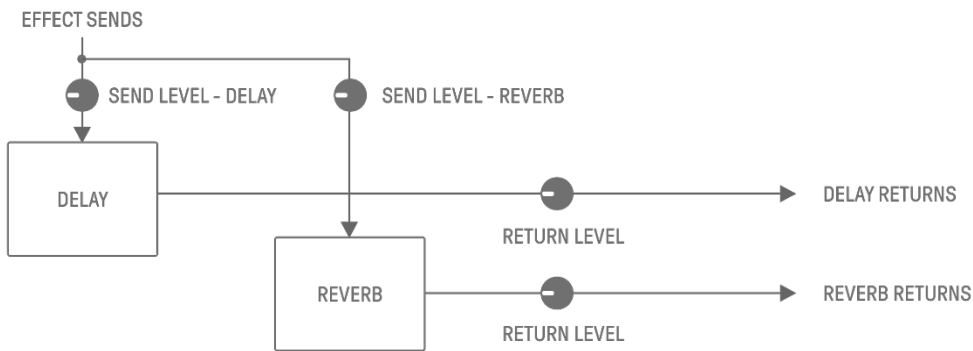
No.	Preset Name	Type	Mode	Octave
1	Off	-	-	-
2	Up	Up	Sort	0
3	Up 2Octave	Up	Sort	+1
4	Down	Down	Sort	0
5	Down 2Octave	Down	Sort	+1
6	Random	Random	Sort	0
7	Random 2Octave	Random	Sort	+1
8	Up / Down A	Up Down 1	Sort	0
9	Up / Down A 2Octave	Up Down 1	Sort	+1
10	Up / Down B	Up Down 2	Sort	0
11	Up / Down B 2Octave	Up Down 2	Sort	+1
12	Thumb Up	Slap & Pop	Sort	0
13	Unison	Unison	Sort	0
14	Chord 1	Rhythm 1	Sort	0
15	Chord 2	Rhythm 2	Sort	0
16	As Played	Up	Thru	0

# Effect Block Diagram

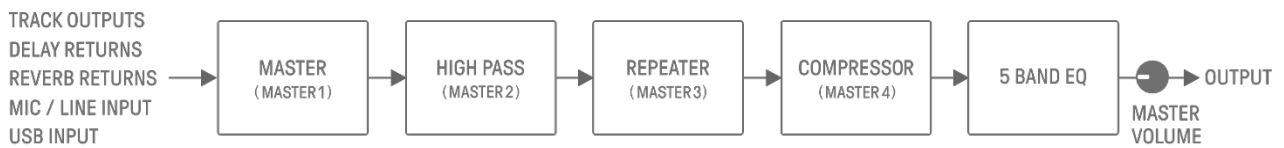
## Track Effect



## Send Effect



## Master Effect



# Effect Type List

Category	Type Name	Type (HEX)		Description	Side Chain	Assignability					
		MSB	LSB			Single	Send	Master 1	Master 2	Master 3	Master 4
--	No Effect / Thru	00	00			✓	✓				
REVERB	SPX HALL	01	02	Reverb emulating the acoustics of a concert hall derived from the Yamaha SPX1000.		✓	✓	✓	✓	✓	
	SPX ROOM	01	12	Reverb emulating the acoustics of a room derived from the Yamaha SPX1000.		✓	✓	✓			
	SPX STAGE	01	30	Reverb appropriate for a solo instrument derived from the Yamaha SPX1000.		✓	✓	✓			
	EARLY REFLECTION	0D	50	This effect isolates only the early reflection components of the Reverb.		✓		✓			
	GATED REVERB	01	50	Simulation of gated reverb.		✓		✓			
	REVERSE REVERB	01	58	Simulation of reverse playback of gated reverb.		✓		✓			
	HD HALL	01	03	Reverb emulating the acoustics of a concert hall.			✓				
	HD ROOM	01	13	Reverb emulating the acoustics of a room.			✓				
	HD PLATE	01	21	Reverb emulating a metal plate			✓				
	REV-X HALL	01	00	Reverb emulating the acoustics of a concert hall using the REV-X technology.			✓				
	REV-X ROOM	01	10	Reverb emulating the acoustics of a room using REV-X technology.			✓				
	R3 HALL	01	01	Reverb emulating the acoustics of a concert hall using the algorithm derived from the Yamaha ProR3.			✓				
	R3 ROOM	01	11	Reverb emulating the acoustics of a room using the algorithm derived from the Yamaha ProR3.			✓				
	R3 PLATE	01	20	Reverb emulating a metal plate using the algorithm derived from the Yamaha ProR3.			✓				
	SPACE SIMULATOR	01	40	Reverb that lets you set the space size by specifying the width, height, and depth.			✓				
DELAY	CROSS DELAY	02	00	The feedback of the two delayed sounds is crossed.		✓	✓	✓			
	TEMPO CROSS DELAY	02	10	Tempo-synchronized Cross delay.		✓	✓	✓	✓	✓	
	TEMPO DELAY MONO	02	20	Tempo-synchronized Mono delay.		✓	✓	✓			
	TEMPO DELAY STEREO	02	28	Tempo-synchronized Stereo delay.		✓	✓	✓			
	CONTROL DELAY	02	30	Delay with delay time that is controllable in real time.		✓	✓	✓			
	DELAY LR	02	40	Produces two delayed sounds in stereo: L and R.		✓	✓	✓			
	DELAY LCR	02	50	Produces three delayed sounds: L, R and C (center).		✓	✓	✓			
	ANALOG DELAY RETRO	02	60	Analog delay driven by bucket-brigade device (BBD) chips with short delay setting.		✓	✓	✓	✓	✓	
	ANALOG DELAY MODERN	02	68	Analog delay driven by bucket-brigade device (BBD) chips with long delay setting.		✓	✓	✓			
FILTER	CONTROL FILTER	0C	28	Manually controlled filter.		✓		✓	✓	✓	
	VCM MINI FILTER	0D	29	Makes the sound "fatter" and tighter. This effect emulates the characteristics of analog synthesizers.		✓		✓	✓	✓	
	LP-HP FILTER	0D	2F	This filter uses one parameter to control both LPF 24dB/oct and HPF 24dB/oct.		✓		✓			
COMPRESSOR / DUCKER	VCM COMPRESSOR 376	08	00	This effect emulates the characteristics of analog compressors—commonly used in recording studios. By squashing the dynamics, it thickens the sound, making it easier to boost in the mix, and is useful for drum and bass sounds.	✓	✓		✓			✓
	CLASSIC COMPRESSOR	08	10	Conventional compressor.	✓	✓		✓			✓
	MULTI BAND COMP	08	20	3-band compressor	✓	✓		✓			✓
	UNI COMP DOWN	08	30	Compressor using "downward" algorithm for making loud sounds quieter.	✓	✓		✓			✓
	UNI COMP UP	08	38	Compressor using "upward" algorithm for making quiet sounds louder.	✓	✓		✓			✓
	PARALLEL COMP	08	40	Compressor applying parallel processing of the compressed sounds and dry sounds.		✓		✓			✓

## Effect Type List

Category	Type Name	Type (HEX)		Description	Side Chain	Assignability					
		MSB	LSB			Single	Send	Master 1	Master 2	Master 3	Master 4
DISTORTION	AMP SIMULATOR 1	07	00	Simulation of a guitar amplifier.		✓		✓			
	AMP SIMULATOR 2	07	10	Simulation of a guitar amplifier.		✓		✓			
	COMP DISTORTION	07	20	Since a Compressor is included in the first stage, steady distortion can be produced regardless of changes in input level.		✓		✓			
	COMP DISTORTION DELAY	07	30	Compressor, Distortion and Delay are connected in series.		✓		✓			
	US COMBO	07	40	American combo amp simulator.		✓		✓			
	JAZZ COMBO	07	41	Jazz combo amp simulator.		✓		✓			
	US HIGH GAIN	07	42	American high gain amp simulator.		✓		✓			
	BRITISH LEAD	07	43	British stack amp simulator.		✓		✓			
	MULTI FX	07	44	Multi effector for guitar.		✓		✓			
	SMALL STEREO	07	45	Stereo distortion for guitar.		✓		✓			
	BRITISH COMBO	07	46	British combo amp simulator.		✓		✓			
	BRITISH LEGEND	07	47	British stack amp simulator.		✓		✓			
	LO-FI	0B	00	Degrades the audio quality of the input signal to get a lo-fi sound, as lowering the sampling frequency.		✓		✓			
	NOISY	0B	10	Adds noise to the current sound.		✓		✓			
	DIGITAL TURNTABLE	0B	20	Simulates the noise of an analog record.		✓		✓			
	BIT CRUSHER	0B	30	Produces distortion by reducing the resolution or bandwidth of the digital sound.		✓		✓	✓	✓	
WAVE FOLDER	0D	28	Makes various changes to the sound over time by varying and controlling the harmonic content.		✓		✓				
MODULATION	G CHORUS	03	00	A Chorus Effect that produces a richer and more complex modulation than normal chorus.		✓		✓			
	2 MODULATOR	03	10	A Chorus Effect consisting of pitch modulation and amplitude modulation.		✓		✓			
	SPX CHORUS	03	20	An effect which uses a 3-phase LFO to add modulation and spaciousness to the sound.		✓		✓			
	SYMPHONIC	03	30	A 3-phase Chorus which uses a complex LFO wave.		✓		✓			
	ENSEMBLE DETUNE	03	40	Chorus effect without modulation, created by adding a slightly pitch-shifted sound.		✓		✓			
	VCM FLANGER	04	00	These effects emulate the characteristics of an analog flanger used in the 1970s, recreating a warm, high-quality flanger effect.		✓		✓			
	CLASSIC FLANGER	04	10	Conventional type of flanger.		✓		✓			
	TEMPO FLANGER	04	20	Tempo-synchronized flanger.		✓		✓	✓	✓	
	DYNAMIC FLANGER	04	30	Dynamically controlled flanger.	✓	✓		✓			
	CONTROL FLANGER	04	08	Manually controlled flanger.		✓		✓			
	VCM PHASER MONO	05	00	This effect emulates the characteristics of analog phasers used in the 1970s, recreating a warm, high-quality phaser effect. This is a mono phaser with VCM technology for producing a vintage sound.		✓		✓			
	VCM PHASER STEREO	05	10	This effect emulates the characteristics of analog phasers used in the 1970s, recreating a warm, high-quality phaser effect. This is a stereo phaser with VCM technology for producing a vintage sound.		✓		✓			
	TEMPO PHASER	05	20	Tempo-synchronized phaser.		✓		✓	✓	✓	
	DYNAMIC PHASER	05	30	Dynamically controlled phase shifter.	✓	✓		✓			
	CONTROL PHASER	05	18	Manually controlled phaser.		✓		✓			
	AUTO PAN	06	00	An effect which cyclically moves the sound left/right and front/back.		✓		✓			
	TREMOLO	06	10	An effect which cyclically modulates the volume.		✓		✓			
	VCM AUTO WAH	0A	00	Modulates the tone via LFO.		✓		✓			
	VCM TOUCH WAH	0A	10	Modulates the tone via Amplitude.		✓		✓			
	VCM PEDAL WAH	0A	20	Modulates the tone via pedal control.		✓		✓			
	RING MODULATOR	0C	00	An effect that modifies the pitch by applying Amplitude Modulation to the frequency of the input.		✓		✓			
	DYNAMIC RING MODULATOR	0C	10	Dynamically controlled Ring Modulator.	✓	✓		✓			
	SPIRALIZER P	0C	38	Unique filter applying Phaser processing with seemingly endless up/down pitch change.		✓		✓			
	TEMPO SPIRALIZER P	0C	39	Spiralizer with tempo-synchronized LFO.		✓		✓			
SPIRALIZER F	0C	3A	Unique filter applying Flanger processing with seemingly endless up/down pitch change.		✓		✓				
TEMPO SPIRALIZER F	0C	3B	Spiralizer with tempo-synchronized LFO.		✓		✓				
TECH MODULATION	0C	60	Adds a unique feeling of modulation similar to ring modulation.		✓		✓				

## Effect Type List

Category	Type Name	Type (HEX)		Description	Side Chain	Assignability					
		MSB	LSB			Single	Send	Master 1	Master 2	Master 3	Master 4
OTHER	ROTARY SPEAKER 1	06	20	Simulation of a rotary speaker.		✓		✓			
	ROTARY SPEAKER 2	06	30	Simulator of a rotary speaker including the amp block.		✓		✓			
	DYNAMIC FILTER	0C	20	Dynamically controlled filter.	✓	✓		✓			
	AUTO SYNTH	0C	30	Processes the input signal into a synthesizer-type sound.		✓		✓			
	ISOLATOR	0C	40	Controls the level of a specified frequency band of the input signal.		✓		✓			
	SLICE	0C	50	Slices the Amplitude EG of the Voice sound.		✓		✓			
	VINYL BREAK	0C	70	Simulates how a turntable slows down gradually (this causes the pitch to drop) before stopping.		✓		✓	✓	✓	
	BEAT REPEAT	0C	7C	Adds a mechanical beat by repeatedly playing sampled sounds.		✓		✓	✓	✓	
	VCM EQ 501	0D	00	This effect emulates the characteristics of analog equalizers used in the 1970s, recreating warm, high-quality equalization.		✓		✓			
	PRESENCE	0D	08	Effect for bringing out the hidden presence in the input sounds.		✓		✓			
	HARMONIC ENHANCER	0D	10	Layers additional harmonics to the input signal to make the sound stand out.		✓		✓			
	STEREOPHONIC OPTIMIZER	0D	18	Adjusts the spacing of the sound and reproduces natural sound distance.		✓		✓			
	TALKING MODULATOR	0D	20	Adds a vowel sound to the input signal.		✓		✓			
	VCM MINI BOOSTER	0D	2A	Creates a unique sonic texture. This effect emulates the characteristics of analog synthesizers.		✓		✓			
	DAMPER RESONANCE	0D	30	Simulates the Resonance produced when the damper pedal of a piano is pressed.		✓		✓			
	PITCH CHANGE	0D	40	Changes the pitch of the input signal.		✓		✓			
	NOISE GATE+COMP+EQ	0D	70	This effect combines Noise Gate, Compressor and 3-Band EQ, to provide optimum processing of the microphone input, especially vocals.		✓		✓			

# Effect Parameter List

## Single / Master Effect Block

### REVERB

#### SPX HALL, SPX ROOM, SPX STAGE

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Reverb Time	0.3s - 30.0s	(0 - 69)	4	2
2	Diffusion	0 - 10	(0 - 10)		
3	Initial Delay	0.1ms - 99.3ms	(0 - 63)	5	
4	HPF Cutoff Frequency	20Hz - 8.0kHz	(0 - 52)	3	
5	LPF Cutoff Frequency	1.0kHz - 20.0kHz	(34 - 60)	3	3
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	Reverb Delay	0.1ms - 99.3ms	(0 - 63)	5	
12	Density	0 - 4	(0 - 4)		
13	ER/Rev Balance	E63>R - E=R - E<R63	(1 - 127)		
14	Feedback High Damp	0.1 - 1.0	(1 - 10)		
15	Feedback Level	0 - 63	(64 - 127)		
16	---				

#### GATED REVERB, REVERSE REVERB

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Type	TypeA, TypeB	(0 - 1)		
2	Room Size	0.1 - 20.0	(0 - 127)	6	2
3	Diffusion	0 - 10	(0 - 10)		
4	Initial Delay	0.1ms - 200ms	(0 - 127)	5	
5	Feedback Level	0 - 63	(64 - 127)		
6	HPF Cutoff Frequency	20Hz - 8.0kHz	(0 - 52)	3	
7	LPF Cutoff Frequency	1.0kHz - 20.0kHz	(34 - 60)	3	3
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	Liveness	0 - 10	(0 - 10)		
12	Density	0 - 3	(0 - 3)		
13	Feedback High Damp	0.1 - 1.0	(1 - 10)		
14	---				
15	---				
16	---				

#### EARLY REFLECTION

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Type	S-hall, L-hall, Random, Reverse, Plate, Spring	(0 - 5)		
2	Room Size	0.1 - 20.0	(0 - 127)	6	2
3	Diffusion	0 - 10	(0 - 10)		
4	Initial Delay	0.1ms - 200ms	(0 - 127)	5	
5	Feedback Level	0 - 63	(64 - 127)		
6	HPF Cutoff Frequency	20Hz - 8.0kHz	(0 - 52)	3	
7	LPF Cutoff Frequency	1.0kHz - 20.0kHz	(34 - 60)	3	3
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	Liveness	0 - 10	(0 - 10)		
12	Density	0 - 3	(0 - 3)		
13	Feedback High Damp	0.1 - 1.0	(1 - 10)		
14	---				
15	---				
16	---				

**DELAY**

**CROSS DELAY**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time L>R	0.1ms - 1638.3ms	(1 - 16383)		2
2	Delay Time R>L	0.1ms - 1638.3ms	(1 - 16383)		2
3	Feedback Level	0 - 63	(64 - 127)		3
4	Input Select	L, R, L&R, L-MODE2, R-MODE2	(0 - 4)		
5	Feedback High Damp	0.1 - 1.0	(1 - 10)		
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	---				
13	EQ Low Frequency	32Hz - 2.0kHz	(4 - 40)	3	
14	EQ Low Gain	-12dB - +12dB	(52 - 76)		
15	EQ High Frequency	500Hz - 16.0kHz	(28 - 58)	3	
16	EQ High Gain	-12dB - +12dB	(52 - 76)		

**TEMPO CROSS DELAY**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time L>R	32nd/3 - 4thx6	(0 - 19)	13	2
2	Delay Time R>L	32nd/3 - 4thx6	(0 - 19)	13	2
3	Feedback Level	0 - 63	(64 - 127)		3
4	Input Select	L, R, L&R, L-MODE2, R-MODE2	(0 - 4)		
5	Feedback High Damp	0.1 - 1.0	(1 - 10)		
6	Lag	-63ms - +63ms	(1 - 127)		
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	---				
13 - 16 Same as the parameters shaded in gray in CROSS DELAY					

**TEMPO DELAY MONO**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time	32nd/3 - 4thx6	(0 - 19)	13	2
2	Feedback Level	0 - 63	(64 - 127)		3
3	Feedback High Damp	0.1 - 1.0	(1 - 10)		
4	L/R Diffusion	-63ms - +63ms	(1 - 127)		
5	Lag	-63ms - +63ms	(1 - 127)		
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	---				
13 - 16 Same as the parameters shaded in gray in CROSS DELAY					

**TEMPO DELAY STEREO**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time	32nd/3 - 4thx6	(0 - 19)	13	2
2	Feedback Level	0 - 63	(64 - 127)		3
3	Feedback High Damp	0.1 - 1.0	(1 - 10)		
4	L/R Diffusion	-63ms - +63ms	(1 - 127)		
5	Lag	-63ms - +63ms	(1 - 127)		
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	---				
13 - 16 Same as the parameters shaded in gray in CROSS DELAY					

**CONTROL DELAY**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time	0.1ms - 1486.0ms	(1 - 14860)		2
2	Delay Transition Rate	1 - 48	(1 - 48)		
3	Feedback Level	0 - 63	(64 - 127)		3
4	Feedback High Damp	0.1 - 1.0	(1 - 10)		
5	---				
6 - 9 Same as the parameters shaded in gray in CROSS DELAY					
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

**DELAY LR**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time L	0.1ms - 1638.3ms	(1 - 16383)		2
2	Delay Time R	0.1ms - 1638.3ms	(1 - 16383)		2
3	Feedback Time L	0.1ms - 1638.3ms	(1 - 16383)		
4	Feedback Time R	0.1ms - 1638.3ms	(1 - 16383)		
5	Feedback Level	0 - 63	(64 - 127)		3
6	Feedback High Damp	0.1 - 1.0	(1 - 10)		
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	---				
13 - 16 Same as the parameters shaded in gray in CROSS DELAY					



DELAY LCR

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time L	0.1ms - 1638.3ms	(1 - 16383)		2
2	Delay Time R	0.1ms - 1638.3ms	(1 - 16383)		2
3	Delay Time C	0.1ms - 1638.3ms	(1 - 16383)		2
4	Feedback Time	0.1ms - 1638.3ms	(1 - 16383)		
5	Feedback Level	0 - 63	(64 - 127)		3
6	Delay Level C	0 - 127	(0 - 127)		
7	Feedback High Damp	0.1 - 1.0	(1 - 10)		
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	---				

13 - 16 Same as the parameters shaded in gray in CROSS DELAY

ANALOG DELAY RETRO

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time	25ms - 800ms	(0 - 127)	41	2
2	Feedback Level	0 - 127	(0 - 127)		3
3	Delay Input Level	0 - 127	(0 - 127)		
4	Type	Mellow, Dub, Narrow, Soft, Dark	(0 - 4)	43	
5	---				
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

ANALOG DELAY MODERN

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time	50ms - 1.0s	(0 - 127)	42	2
2	Feedback Level	0 - 127	(0 - 127)		3
3	Delay Input Level	0 - 127	(0 - 127)		
4	Type	Urban, Dub, Narrow, Soft, Dark	(0 - 4)	44	
5	---				
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

**FILTER**

**CONTROL FILTER**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Filter Type	LPF(12dB), LPF(18dB), LPF(24dB), HPF, BPF	(0 - 4)		
2	Cutoff Frequency Control	0 - 127	(0 - 127)		1
3	Resonance	0 - 127	(0 - 127)		2
4	Filter Output Level	-12dB - +12dB	(52 - 76)		3
5	---				
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

**LP-HP FILTER**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	LPF/HPF Cutoff Frequency (*)	-256 - -1 (LPF24A), 0 (Thru), +1 - +256 (HPF24A)	(0 - 256 - 512)		1
2	Resonance	-6 - 0 - 41.625[dB] (0.375[dB]step)	(0 - 16 - 127)		2
3	---				
4	---				
5	---				
6	---				
7	---				
8	---				
9	---				
10	---				
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

(\*) Internally limited depending on Resonance.

**VCM MINI FILTER**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Cutoff Frequency	0.00 - 100.00	(0 - 10000)		1
2	Resonance	0.0 - 1.0	(0 - 500)		2
3	---				
4	Type	LPH, HPF	(0 - 1)		
5	Texture	Retro, Standard, Modern	(0 - 2)		
6	---				
7	---				
8	---				
9	Input Level	-36 - +24dB	(0 - 120)		
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	Output Level	-40 - +20dB	(0 - 120)		3
12	---				
13	---				
14	---				
15	---				
16	---				

**COMPRESSOR / DUCKER**

**VCM COMPRESSOR 376**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Input Level	-∞ - 0.00dB	(0 - 200)	25	2
2	Output Level	-∞ - 0.00dB	(0 - 200)	25	3
3	Ratio	2, 4, 8, 12, 20	(0 - 4)		1
4	Attack	0.022ms - 50.40ms	(0 - 200)	26	2 (*)
5	Release	10.88ms - 544.22ms	(0 - 200)	27	3 (*)
6	---				
7	---				
8	---				
9	---				
10	---				
11	Side Chain Input Level	-∞dB - 0dB - +24dB	(0 - 127)	45	1 (*)
12	---				
13	---				
14	---				
15	---				
16	---				

(\*) for Ducker.

**MULTI BAND COMP**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Low Attack	1ms - 200ms	(0 - 29)	8	
2	Low Threshold	-54dB - -6dB	(73 - 121)		
3	Low Ratio	1.0 - 20.0	(0 - 7)	10	1
4	Low Gain	-∞ - +18dB	(0 - 55)	14	
5	Mid Attack	1ms - 200ms	(0 - 29)	8	2 (*)
6	Mid Threshold	-54dB - -6dB	(73 - 121)		
7	Mid Ratio	1.0 - 20.0	(0 - 7)	10	2
8	Mid Gain	-∞ - +18dB	(0 - 55)	14	
9	High Attack	1ms - 200ms	(0 - 29)	8	
10	High Threshold	-54dB - -6dB	(73 - 121)		
11	High Ratio	1.0 - 20.0	(0 - 7)	10	3
12	High Gain	-∞ - +18dB	(0 - 55)	14	
13	Divide Freq Low	16Hz - 20kHz	(0 - 124)	28	
14	Divide Freq High	16Hz - 20kHz	(0 - 124)	28	
15	Common Release	10ms - 3000ms	(0 - 23)	9	3 (*)
16	Side Chain Input Level	-∞dB - 0dB - +24dB	(0 - 127)	45	1 (*)

(\*) for Ducker.

**CLASSIC COMPRESSOR**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Attack	1ms - 40ms	(0 - 19)	8	2 (*)
2	Release	10ms - 680ms	(0 - 15)	9	3 (*)
3	Threshold	-48dB - -6dB	(79 - 121)		2
4	Ratio	1.0 - 20.0	(0 - 7)	10	1
5	Output Level	0 - 127	(0 - 127)		3
6	---				
7	---				
8	---				
9	---				
10	---				
11	Side Chain Input Level	-∞dB - 0dB - +24dB	(0 - 127)	45	1 (*)
12	---				
13	---				
14	---				
15	---				
16	---				

(\*) for Ducker.

**UNIVERSAL COMPRESSOR DOWN**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Threshold	-60dB - 0dB	(0 - 120)		2
2	Knee	0 - 8	(0 - 8)		
3	Attack	0.01ms - 80ms	(0 - 127)	50	2 (*)
4	Release	6.25ms - 999.0ms	(0 - 127)	51	3 (*)
5	Ratio	1.00 - ∞	(0 - 127)	52	1
6	Side Chain EQ Switch	Off, On	(0 - 1)		
7	Side Chain EQ Q	0.1 - 10.0	(0 - 126)	53	
8	Side Chain EQ Frequency	11.89Hz - 17.78kHz	(0 - 127)	54	
9	Side Chain EQ Gain	-30 - +30dB	(0 - 120)		
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		
11	Output Level	-20 - +40dB	(0 - 120)		
12	Make Up Gain	-20 - +40dB	(0 - 120)		3
13	Post-comp HPF	Off, 1.035Hz - 80.35Hz	(0 - 127)	55	
14	Clipper	Off, 1 - 100	(0 - 100)		
15	Clipper Source	Dry+Wet, Wet	(0 - 1)		
16	---				
17	Side Chain Input Level	-∞dB - 0dB - +24dB	(0 - 127)	45	1 (*)

(\*) for Ducker.

UNIVERSAL COMPRESSOR UP

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Threshold	-60dB - 0dB	(0 - 120)		2
2	Knee	0 - 8	(0 - 8)		
3	Attack	0.01ms - 80ms	(0 - 127)	50	2 (*)
4	Release	6.25ms - 999.0ms	(0 - 127)	51	3 (*)
5	Ratio	1 - ∞	(0 - 127)	52	1
6	Side Chain EQ Switch	Off, On	(0 - 1)		
7	Side Chain EQ Q	0.1 - 10.0	(0 - 126)	53	
8	Side Chain EQ Frequency	11.89Hz - 17.78kHz	(0 - 127)	54	
9	Side Chain EQ Gain	-30 - +30 dB	(0 - 120)		
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		
11	Output Level	-20 - +40dB	(0 - 120)		
12	Make Up Gain	-20 - +20dB	(0 - 80)		3
13	Post-comp HPF	Off, 1.035Hz - 80.35Hz	(0 - 127)	55	
14	Clipper	Off, 1 - 100	(0 - 100)		
15	Clipper Source	Dry+Wet, Wet	(0 - 1)		
16	Gain Limit	0 - +12dB	(0 - 120)		
17	Side Chain Input Level	-∞dB - 0dB - +24dB	(0 - 127)	45	1 (*)

(\*) for Ducker.

PARALLEL COMPRESSOR

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Type	Natural,Rich, Punchy, Electronic,Loud	(0 - 4)		
2	Compression	0 - 100	(0 - 100)		1
3	Texture	0 - 100	(0 - 100)		2
4	Output Level	-18dB - +18dB	(0 - 120)		3
5	Input Level	-18dB - +18dB	(0 - 120)		
6	---				
7	---				
8	---				
9	---				
10	---				
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

**DISTORTION**

**AMP SIMULATOR 1**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Overdrive	0 - 100%	(0 - 100)		2
2	Device	Transistor, Vintage Tube, Distortion1, Distortion2, Fuzz	(0 - 4)		
3	Speaker Type	Flat, Stack, Combo, Twin, Radio, Megaphone	(0 - 5)		
4	Presence	-10 - +10	(0 - 20)		3
5	Output Level	0 - 100%	(0 - 100)		
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

**AMP SIMULATOR 2**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Overdrive	0 - 127	(0 - 127)		2
2	AMP Type	Off, Stack, Combo, Tube, Crunch, Hi Gain, British	(0 - 6)		
3	LPF Cutoff Frequency	1.0kHz - 20.0kHz	(34 - 60)	3	3
4	Output Level	0 - 127	(0 - 127)		
5	---				
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

**COMP DISTORTION**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Overdrive	0 - 127	(0 - 127)		2
2	EQ Low Frequency	32Hz - 2.0kHz	(4 - 40)	3	
3	EQ Low Gain	-12dB - +12dB	(52 - 76)		
4	LPF Cutoff Frequency	1.0kHz - 20.0kHz	(34 - 60)	3	3
5	Output Level	0 - 127	(0 - 127)		
6	---				
7	EQ Mid Frequency	100Hz - 10.0kHz	(14 - 54)	3	
8	EQ Mid Gain	-12dB - +12dB	(52 - 76)		
9	EQ Mid Width	0.1 - 12.0	(1 - 120)		
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	Edge	0 - 127	(0 - 127)		
12	Attack	1ms - 40ms	(0 - 19)	8	
13	Release	10ms - 680ms	(0 - 15)	9	
14	Threshold	-48dB - -6dB	(79 - 121)		
15	Ratio	1.0 - 20.0	(0 - 7)	10	
16	---				

**COMP DISTORTION DELAY**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Overdrive	0 - 100%	(0 - 100)		2
2	Device	Transistor, Vintage Tube, Distortion1, Distortion2, Fuzz	(0 - 4)		
3	Speaker Type	Flat, Stack, Combo, Twin, Radio, Megaphone	(0 - 5)		
4	Presence	-10 - 10	(0 - 20)		3
5	Output Level	0 - 100%	(0 - 100)		
6	Delay Time L	0.1ms - 1638.3ms	(1 - 16383)		
7	Delay Time R	0.1ms - 1638.3ms	(1 - 16383)		
8	Feedback Time	0.1ms - 1638.3ms	(1 - 16383)		
9	Feedback Level	0 - 63	(64 - 127)		
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	Delay Mix	0 - 127	(0 - 127)		
12	Feedback High Damp	0.1 - 1.0	(1 - 10)		
13	Compress	-48dB - -6dB	(79 - 121)		
14	---				
15	---				
16	---				

## Effect Parameter List

### US COMBO

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Gain Boost	Low, High	(0 - 1)		
2	Volume	0.0 - 10.0	(0 - 100)		1
3	Low Cut	0.0 - 10.0	(0 - 100)		
4	Mid Cut	0.0 - 10.0	(0 - 100)		
5	Mid Width	0.0 - 10.0	(0 - 100)		
6	Mid Sweep	0.0 - 10.0	(0 - 100)		
7	High Cut	0.0 - 10.0	(0 - 100)		
8	Balance	0.0 - 10.0	(0 - 100)		2
9	Output Level	0 - 127	(0 - 127)		
10	---				
11	Speaker Type	Off, BS 4x12, AC 2x12, AC 1x12, AC 4x10, BC 2x12, AM 4x12, YC 4x12, JC 2x12, OC 2x12, OC 1x8	(0 - 10)	30	
12	Speaker Air	0 - 2	(0 - 2)		
13	Mic Position	Center, Edge	(0 - 1)		
14	Presence	0.0 - 10.0	(0 - 100)		3
15	---				
16	---				

### US HIGH GAIN

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Type	Raw1, Vintage1, Modern1, Raw2, Vintage2, Modern2	(0 - 5)		32
2	Gain	0.0 - 10.0	(0 - 100)		1
3	---				
4	Bass	0.0 - 10.0	(0 - 100)		
5	Middle	0.0 - 10.0	(0 - 100)		2
6	Treble	0.0 - 10.0	(0 - 100)		3
7	Presence	0.0 - 10.0	(0 - 100)		
8	Master Volume	0.0 - 10.0	(0 - 100)		
9	Output Level	0 - 127	(0 - 127)		
10	---				
11	Speaker Type	Off, BS 4x12, AC 2x12, AC 1x12, AC 4x10, BC 2x12, AM 4x12, YC 4x12, JC 2x12, OC 2x12, OC 1x8	(0 - 10)	30	
12	Speaker Air	0 - 2	(0 - 2)		
13	Mic Position	Center, Edge	(0 - 1)		
14	---				
15	---				
16	---				

### JAZZ COMBO

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Panning	0.0 - 10.0	(0 - 100)		
2	Volume	0.0 - 10.0	(0 - 100)		
3	Distortion	Off, 0.1 - 10.0	(0 - 100)		1
4	Bass	0.0 - 10.0	(0 - 100)		
5	Middle	0.0 - 10.0	(0 - 100)		
6	Treble	0.0 - 10.0	(0 - 100)		3
7	High Treble	0.0 - 10.0	(0 - 100)		
8	---				
9	Output Level	0 - 127	(0 - 127)		
10	---				
11	Speaker Type	Off, BS 4x12, AC 2x12, AC 1x12, AC 4x10, BC 2x12, AM 4x12, YC 4x12, JC 2x12, OC 2x12, OC 1x8	(0 - 10)	30	
12	Speaker Air	0 - 2	(0 - 2)		
13	Mic Position	Center, Edge	(0 - 1)		
14	Chorus	Off, Chorus, Vib	(0 - 2)		
15	Vib Speed	0.0 - 10.0	(0 - 100)		
16	Depth	0.0 - 10.0	(0 - 100)		2

### BRITISH LEAD

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Type	Crunch, Hi-Gain, Lead	(0 - 2)		
2	Preamp	0.0 - 10.0	(0 - 100)		1
3	Tone Shift	Normal, Loose, Tight	(0 - 2)		
4	Bass	0.0 - 10.0	(0 - 100)		
5	Middle	0.0 - 10.0	(0 - 100)		2
6	Treble	0.0 - 10.0	(0 - 100)		3
7	Presence	0.0 - 10.0	(0 - 100)		
8	Master Volume	0.0 - 10.0	(0 - 100)		
9	Output Level	0 - 127	(0 - 127)		
10	---				
11	Speaker Type	Off, BS 4x12, AC 2x12, AC 1x12, AC 4x10, BC 2x12, AM 4x12, YC 4x12, JC 2x12, OC 2x12, OC 1x8	(0 - 10)	30	
12	Speaker Air	0 - 2	(0 - 2)		
13	Mic Position	Center, Edge	(0 - 1)		
14	---				
15	---				
16	---				

MULTI FX

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Comp. Sustain	Off, 0.1 - 10.0	(0 - 100)		2
2	Wah SW	Off, Wah Pedal, Auto+ Full, Auto+ Mid, Auto+ Light, Auto- Full, Auto- Mid, Auto- Light	(0 - 7)	33	
3	Wah Pedal	0 - 127	(0 - 127)		
4	Dist SW	Off, Overdrive, Distortion1, Distortion2, Clean, Crunch, Hi-Gain, Modern	(0 - 7)	34	
5	Dist Drive	0.0 - 10.0	(0 - 100)		1
6	Dist EQ	High Boost, Mid Boost, Mid Cut 1, Mid Cut 2, Mid Cut 3, Low Cut 1, Low Cut 2, High Cut, High/Low	(0 - 8)	35	
7	Dist Tone	0.0 - 10.0	(0 - 100)		
8	Dist Presence	0.0 - 10.0	(0 - 100)		3
9	Output Level	0 - 127	(0 - 127)		
10	---				
11	Speaker Type	Off, Stack, Twin, Tweed, Oldies, Modern, Mean, Soft, Small, Dip1, Dip2, Metal, Light	(0 - 12)	31	
12	LFO Speed	0.100Hz - 9.925Hz	(0 - 127)	36	
13	Phaser SW	Off, Standard, Wide, Vibe, Tremolo	(0 - 4)	37	
14	Delay SW	Off, Delay M, Echo1 M, Echo2 M, Chorus M, Dly Chorus M, Flanger1 M, Flanger2 M, Flanger3 M, Delay St, Echo1 St, Echo2 St, Chorus St, DI Chorus St, Flanger1 St, Flanger2 St, Flanger3 St	(0 - 16)	38	
15	Delay Ctrl	0 - 127	(0 - 127)		
16	Delay Time	0 - 127	(0 - 127)		

SMALL STEREO

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Comp. SW	Off, On	(0 - 1)		
2	Comp. Sustain	0.0 - 10.0	(0 - 100)		
3	Comp. Level	0.0 - 10.0	(0 - 100)		
4	Dist Type	Overdrive, Distortion1, Distortion2, Clean, Crunch, Hi-Gain, Modern	(1 - 7)	34	
5	Dist Drive	0.0 - 10.0	(0 - 100)		1
6	Dist EQ	High Boost, Mid Boost, Mid Cut 1, Mid Cut 2, Mid Cut 3, Low Cut 1, Low Cut 2, High Cut, High/Low	(0 - 8)	35	
7	Dist Tone	0.0 - 10.0	(0 - 100)		2
8	Dist Presence	0.0 - 10.0	(0 - 100)		3
9	Output Level	0 - 127	(0 - 127)		
10	---				
11	Speaker Type	Off, Stack, Twin, Tweed, Oldies, Modern, Mean, Soft, Small, Dip1, Dip2, Metal, Light	(0 - 12)	31	
12	---				
13	---				
14	---				
15	---				
16	---				

BRITISH COMBO

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Mode	Bright, Top Boost	(0 - 1)		
2	Normal	0.0 - 10.0	(0 - 100)		1
3	Brilliant	0.0 - 10.0	(0 - 100)		2
4	Bass	0.0 - 10.0	(0 - 100)		
5	---				
6	Treble	0.0 - 10.0	(0 - 100)		
7	Cut	0.0 - 10.0	(0 - 100)		3
8	---				
9	Output Level	0 - 127	(0 - 127)		
10	---				
11	Speaker Type	Off, BS 4x12, AC 2x12, AC 1x12, AC 4x10, BC 2x12, AM 4x12, YC 4x12, JC 2x12, OC 2x12, OC 1x8	(0 - 10)	30	
12	Speaker Air	0 - 2	(0 - 2)		
13	Mic Position	Center, Edge	(0 - 1)		
14	---				
15	---				
16	---				

BRITISH LEGEND

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Sensitivity	High, Low	(0 - 1)		
2	Preamp	0.0 - 10.0	(0 - 100)		1
3	---				
4	Bass	0.0 - 10.0	(0 - 100)		
5	Middle	0.0 - 10.0	(0 - 100)		2
6	Treble	0.0 - 10.0	(0 - 100)		3
7	Presence	0.0 - 10.0	(0 - 100)		
8	Master Volume	0.0 - 10.0	(0 - 100)		
9	Output Level	0 - 127	(0 - 127)		
10	---				
11	Speaker Type	Off, BS 4x12, AC 2x12, AC 1x12, AC 4x10, BC 2x12, AM 4x12, YC 4x12, JC 2x12, OC 2x12, OC 1x8	(0 - 10)	30	
12	Speaker Air	0 - 2	(0 - 2)		
13	Mic Position	Center, Edge	(0 - 1)		
14	---				
15	---				
16	---				

LO-FI

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Sampling Frequency Control	44.1kHz - 344.5Hz	(0 - 127)	12	1
2	Word Length	1 - 127	(1 - 127)		2
3	Output Level	-6dB - +36dB	(0 - 42)		
4	Pre-LPF Cutoff Frequency	63Hz - 20.0kHz	(10 - 60)	3	
5	Filter Type	Thru, PowerBass, Radio, Telephone, Clean, Low	(0 - 5)		
6	Pre-LPF Resonance	1.0 - 12.0	(10 - 120)		
7	Bit Assign	0 - 6	(0 - 6)		
8	Emphasis	Off, On	(0 - 1)		
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		3
11	---				
12	---				
13	---				
14	---				
15	Input Mode	Mono, Stereo	(0 - 1)		
16	---				

NOISY

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Mod Depth	0 - 10	(0 - 10)		
2	Mod Speed	0 - 127	(0 - 127)		
3	Mod Feedback	0 - 63	(64 - 127)		
4	Mod Mix Balance	1 - 127	(1 - 127)		
5	Drive	0 - 127	(0 - 127)		2
6	AM Speed	0.00Hz - 39.7Hz	(0 - 127)	1	
7	AM Depth	0 - 127	(0 - 127)		
8	LPF Cutoff Frequency	1.0kHz - 20.0kHz	(34 - 60)	3	3
9	LPF Resonance	1.0 - 12.0	(10 - 120)		
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	EQ Frequency	100Hz - 10.0kHz	(14 - 54)	3	
12	EQ Gain	-12dB - +12dB	(52 - 76)		
13	EQ Width	1.0 - 12.0	(10 - 120)		
14	---				
15	---				
16	---				

DIGITAL TURNTABLE

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Click Density	0 - 5	(0 - 5)		
2	Click Level	0 - 127	(0 - 127)		2
3	Noise Tone	0 - 6	(0 - 6)		
4	Noise Mod Speed	0.00Hz - 39.7Hz	(0 - 127)	1	
5	Noise Mod Depth	0 - 127	(0 - 127)		
6	Dry Send to Noise	0 - 127	(0 - 127)		3
7	Noise LPF Cutoff Frequency	1.0kHz - 20.0kHz	(34 - 60)	3	
8	Noise LPF Q	1.0 - 12.0	(10 - 120)		
9	Noise Level	0 - 127	(0 - 127)		1
10	---				
11	Dry Level	0 - 127	(0 - 127)		
12	Dry LPF Cutoff Frequency	1.0kHz - 20.0kHz	(34 - 60)	3	
13	---				
14	---				
15	---				
16	---				



## BIT CRUSHER

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Sample Rate	0 - 100.00	(0 - 16383)		1
2	Bit	1 - 16	(1 - 16)		2
3	Crush Type	Soft, Hard	(0 - 1)		
4	Input Level	-19.5dB - +12dB	(1 - 127)	47	
5	M/S	Off, On	(0 - 1)		
6	Side Sample Rate	0 - 100.00	(0 - 16383)		
7	Side Bit	1 - 16	(1 - 16)		
8	Sample Rate Link	-1.0 - +1.0	(0 - 100)		
9	Bit Link	-1.0 - +1.0	(0 - 100)		
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		3
11	Output Level	-19.5dB - +12dB	(1 - 127)	47	
12	---				
13	---				
14	---				
15	---				
16	---				

## WAVE FOLDER

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Fold	0.000 - 1.000	(0 - 1000)		2
2	Fold Type	Soft, Hard	(0 - 1)		
3	LFO Depth	0 - 127	(0 - 127)		
4	LFO Speed	0.01Hz - 1400Hz	(0 - 1023)	62	
5	LFO Shape	-50 - +50	(0 - 100)		
6	---				
7	---				
8	---				
9	Input Level	-40 - +20dB	(0 - 120)		3
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	Output Level	-40 - +20dB	(0 - 120)		
12	SEQ Depth	0 - 127	(0 - 127)		
13	SEQ Clock	0.5x - 10.0x	(0 - 15)	63	
14	SEQ Pattern	A - J	(0 - 9)	64	
15	SEQ Variation	0 - 100	(0 - 100)		
16	SEQ Phase Reset	OFF, Key On, Seq Start, Seq Start + Bar	(0 - 3)		

**MODULATION**

**G CHORUS**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	LFO Speed	0.0Hz - 39.70Hz	(0 - 127)	1	2
2	---				
3	PM Depth	0 - 127	(0 - 127)		3
4	Feedback Level	0 - 63	(64 - 127)		
5	Delay Offset	0.0ms - 50.0ms	(0 - 127)	2	
6 - 9 Same as the parameters shaded in gray in CROSS DELAY					
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	EQ Mid Frequency	100Hz - 10.0kHz	(14 - 54)	3	
12	EQ Mid Gain	-12dB - +12dB	(52 - 76)		
13	EQ Mid Width	0.1 - 12.0	(1 - 120)		
14	---				
15	Input Mode	Mono, Stereo	(0 - 1)		
16	---				

**SYMPHONIC**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	LFO Speed	0.0Hz - 39.70Hz	(0 - 127)	1	2
2	LFO Depth	0 - 127	(0 - 127)		3
3	Delay Offset	0.0ms - 50.0ms	(0 - 127)	2	
4	---				
5	---				
6 - 9 Same as the parameters shaded in gray in CROSS DELAY					
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	EQ Mid Frequency	100Hz - 10.0kHz	(14 - 54)	3	
12	EQ Mid Gain	-12dB - +12dB	(52 - 76)		
13	EQ Mid Width	0.1 - 12.0	(1 - 120)		
14	---				
15	---				
16	---				

**2 MODULATOR**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	LFO Speed	0.0Hz - 39.70Hz	(0 - 127)	1	2
2	AM Depth	0 - 127	(0 - 127)		
3	PM Depth	0 - 127	(0 - 127)		3
4	Feedback Level	0 - 63	(64 - 127)		
5	Delay Offset	0.0ms - 50.0ms	(0 - 127)	2	
6 - 9 Same as the parameters shaded in gray in CROSS DELAY					
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	EQ Mid Frequency	100Hz - 10.0kHz	(14 - 54)	3	
12	EQ Mid Gain	-12dB - +12dB	(52 - 76)		
13	EQ Mid Width	0.1 - 12.0	(1 - 120)		
14	---				
15	Input Mode	Mono, Stereo	(0 - 1)		
16	---				

**ENSEMBLE DETUNE**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Detune	-50cent - +50cent	(14 - 114)		2
2	Initial Delay Lch	0.0ms - 50.0ms	(0 - 127)	2	
3	Initial Delay Rch	0.0ms - 50.0ms	(0 - 127)	2	
4	Spread	0 - 63	(0 - 63)		3
5	---				
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11 - 14 Same as the parameters shaded in gray in CROSS DELAY					
15	---				
16	---				

**SPX CHORUS**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	LFO Speed	0.0Hz - 39.70Hz	(0 - 127)	1	2
2	LFO Depth	0 - 127	(0 - 127)		3
3	Feedback Level	0 - 63	(64 - 127)		
4	Delay Offset	0.0ms - 50.0ms	(0 - 127)	2	
5	---				
6 - 9 Same as the parameters shaded in gray in CROSS DELAY					
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	EQ Mid Frequency	100Hz - 10.0kHz	(14 - 54)	3	
12	EQ Mid Gain	-12dB - +12dB	(52 - 76)		
13	EQ Mid Width	0.1 - 12.0	(1 - 120)		
14	---				
15	Input Mode	Mono, Stereo	(0 - 1)		
16	---				

**VCM FLANGER**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Speed	0.040Hz - 10.00Hz	(0 - 235)	20	2
2	Manual	0 - 127	(0 - 127)		
3	Depth	0 - 127	(0 - 127)		3
4	Feedback	0 - 127	(0 - 127)		
5	Type	1 - 3	(0 - 2)		
6	Spread	0 - 127	(0 - 127)		
7	Mix	0 - 127	(0 - 127)		1
8	---				
9	---				
10	---				
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

CLASSIC FLANGER

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	LFO Speed	0.0Hz - 39.70Hz	(0 - 127)	1	2
2	LFO Depth	0 - 127	(0 - 127)		3
3	LFO Wave	Triangle, Sine, Random	(0 - 2)		
4	Delay Offset	0.09 - 36.21ms	(0 - 139)	18	
5	Feedback Level	0 - 100%	(100 - 200)		
6 - 9 Same as the parameters shaded in gray in CROSS DELAY					
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	EQ Mid Frequency	100Hz - 10.0kHz	(14 - 54)	3	
12	EQ Mid Gain	-12dB - +12dB	(52 - 76)		
13	EQ Mid Width	0.1 - 12.0	(1 - 120)		
14	Modulation Phase	-180 - +180	(0 - 16)	19	
15	Feedback High Damp	0.1 - 1.0	(1 - 10)		
16	Analog Feel	0 - 10	(0 - 10)		

TEMPO FLANGER

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	LFO Speed	16th - 4thx16	(5 - 29)	13	2
2	LFO Depth	0 - 127	(0 - 127)		3
3	Feedback Level	0 - 63	(64 - 127)		
4	Delay Offset	0.0ms - 50.0ms	(0 - 127)	2	
5	LFO Phase Reset	Off(free run), KeyOnReset, SEQ Start Reset	(0 - 2)		
6 - 9 Same as the parameters shaded in gray in CROSS DELAY					
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	EQ Mid Frequency	100Hz - 10.0kHz	(14 - 54)	3	
12	EQ Mid Gain	-12dB - +12dB	(52 - 76)		
13	EQ Mid Width	0.1 - 12.0	(1 - 120)		
14	LFO Phase Difference	-180deg - +180deg	(4 - 124)		
15	---				
16	---				

DYNAMIC FLANGER

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Sensitivity	0 - 127	(0 - 127)		2
2	Delay Offset	0 - 127	(0 - 127)		
3	Feedback Level	0 - 63	(64 - 127)		3
4	Attack Time	0.3ms - 227ms	(0 - 127)	15	
5	Release Time	2.6ms - 2171ms	(0 - 127)	16	
6	Release Curve	0 - 127	(0 - 127)		
7	Direction	Up, Down	(0 - 1)		
8	Dyna Threshold Level	0 - 127	(0 - 127)		
9	Dyna Level Offset	0 - 127	(0 - 127)		
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	Side Chain Input Level	---dB - 0dB - +24dB	(0 - 127)	45	
13 - 16 Same as the parameters shaded in gray in CROSS DELAY					

CONTROL FLANGER

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Flanger Control	0 - 127	(0 - 127)		1
2	Bottom	0 - 127	(0 - 127)		
3	Top	0 - 127	(0 - 127)		2
4	Feedback	0 - 127	(0 - 127)		3
5	Type	1 - 3	(0 - 2)		
6	Spread	0 - 127	(0 - 127)		
7	Mix	0 - 127	(0 - 127)		
8	---				
9	---				
10	---				
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

VCM PHASER MONO

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Speed	0.100Hz - 10.00Hz	(0 - 252)	21	2
2	Manual	0 - 127	(0 - 127)		
3	Depth	0 - 127	(0 - 127)		1
4	Feedback	0 - 127	(0 - 127)		3
5	Stage	4, 6, 8, 10, 12, 16	(0 - 5)		
6	Mode	1, 2, 3	(0 - 2)		
7	Color	0 - 127	(0 - 127)		
8	---				
9	---				
10	---				
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

The Color parameter is not available in the following conditions: When Mode is set to 1 and Stage is set to 4, 6, 8, 12 or 16; or when Mode is set to 2 and Stage is set to 4 or 10.

VCM PHASER STEREO

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Speed	0.100Hz - 10.00Hz	(0 - 252)	21	2
2	Manual	0 - 127	(0 - 127)		
3	Depth	0 - 127	(0 - 127)		1
4	Feedback	0 - 127	(0 - 127)		3
5	Stage	4, 6, 8, 10	(0 - 3)		
6	Mode	1, 2	(0 - 1)		
7	Color	0 - 127	(0 - 127)		
8	Spread	0 - 127	(0 - 127)		
9	---				
10	---				
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

The Color parameter is not available in the following conditions: When Mode is set to 1 and Stage is set to 4, 6, or 8; or when Mode is set to 2 and Stage is set to 4 or 10.

TEMPO PHASER

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	LFO Speed	16th - 4thx16	(5 - 29)	13	2
2	LFO Depth	0 - 127	(0 - 127)		1
3	Phase Shift Offset	0 - 127	(0 - 127)		
4	Feedback Level	0 - 63	(64 - 127)		3
5	LFO Phase Reset	Off(free run), KeyOnReset, SEQ Start Reset	(0 - 2)		
6 - 9 Same as the parameters shaded in gray in CROSS DELAY					
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		
11	Stage	4 - 22	(4 - 22)		
12	Diffusion	Mono, Stereo	(0 - 1)		
13	---				
14	---				
15	---				
16	---				

DYNAMIC PHASER

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Sensitivity	0 - 127	(0 - 127)		2
2	Dyna Level Offset	0 - 127	(0 - 127)		
3	Feedback Level	0 - 63	(64 - 127)		3
4	Attack Time	0.3ms - 227ms	(0 - 127)	15	
5	Release Time	2.6ms - 2171ms	(0 - 127)	16	
6	Release Curve	0 - 127	(0 - 127)		
7	Direction	Up, Down	(0 - 1)		
8	Dyna Threshold Level	0 - 127	(0 - 127)		
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	Stage	4, 5, 6	(4 - 6)		
12	Side Chain Input Level	-∞dB - 0dB - +24dB	(0 - 127)	45	
13 - 16 Same as the parameters shaded in gray in CROSS DELAY					

CONTROL PHASER

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Phase Control	0 - 127	(0 - 127)		1
2	Bottom	0 - 127	(0 - 127)		
3	Top	0 - 127	(0 - 127)		2
4	Feedback	0 - 127	(0 - 127)		3
5	Stage	4, 6, 8, 10	(0 - 3)		
6	Mode	1, 2	(0 - 1)		
7	Color	0 - 127	(0 - 127)		
8	Spread	0 - 127	(0 - 127)		
9	---				
10	---				
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

AUTO PAN

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	LFO Speed	0.0Hz - 39.70Hz	(0 - 127)	1	2
2	L/R Depth	0 - 127	(0 - 127)		1
3	F/R Depth	0 - 127	(0 - 127)		
4	Pan Direction	L<>R, L>>R, L<<R, L Turn, R Turn, L/R	(0 - 5)		
5	LFO Wave	0 - 28	(0 - 28)		3
6 - 9 Same as the parameters shaded in gray in CROSS DELAY					
10	---				
11	EQ Mid Frequency	100Hz - 10.0kHz	(14 - 54)	3	
12	EQ Mid Gain	-12dB - +12dB	(52 - 76)		
13	EQ Mid Width	0.1 - 12.0	(1 - 120)		
14	---				
15	Input Mode	Mono, Stereo	(0 - 1)		
16	---				

TREMOLO

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	LFO Speed	0.0Hz - 39.70Hz	(0 - 127)	1	2
2	AM Depth	0 - 127	(0 - 127)		1
3	PM Depth	0 - 127	(0 - 127)		3
4	---				
5	---				
6 - 9 Same as the parameters shaded in gray in CROSS DELAY					
10	---				
11	EQ Mid Frequency	100Hz - 10.0kHz	(14 - 54)	3	
12	EQ Mid Gain	-12dB - +12dB	(52 - 76)		
13	EQ Mid Width	0.1 - 12.0	(1 - 120)		
14	LFO Phase Difference	-180deg - +180deg	(4 - 124)		
15	Input Mode	Mono, Stereo	(0 - 1)		
16	---				

VCM AUTO WAH

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Speed	0.100Hz - 20.00Hz	(0 - 254)	22	1
2	Bottom	0 - 127	(0 - 127)		
3	Top	0 - 127	(0 - 127)		
4	Resonance Offset	-12.0 - +12.0	(40 - 88)		2
5	LFO Wave	Sin, Trp	(0 - 1)		
6	Type	High, Mid, Low, Bass	(0 - 3)		
7	Overdrive	0.0dB - +40.0dB	(0 - 80)		
8	Output	-20.0dB - +10.0dB	(24 - 84)		3
9	---				
10	---				
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

When the value of Bottom is greater than Top, the sound will not be modulated and only the Bottom value is available.

VCM PEDAL WAH

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Pedal Control	0 - 127	(0 - 127)		1
2	Bottom	0 - 127	(0 - 127)		
3	Top	0 - 127	(0 - 127)		
4	Resonance Offset	-12.0 - +12.0	(40 - 88)		2
5	Direction	Up, Down	(0 - 1)		
6	Type	High, Mid, Low, Bass	(0 - 3)		
7	Overdrive	0.0dB - +40.0dB	(0 - 80)		
8	Output	-20.0dB - +10.0dB	(24 - 84)		3
9	---				
10	---				
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

When the value of Bottom is greater than Top, the sound will not be modulated and only the Bottom value is available.

VCM TOUCH WAH

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Sensitivity	0 - 127	(0 - 127)		1
2	Bottom	0 - 127	(0 - 127)		
3	Top	0 - 127	(0 - 127)		
4	Resonance Offset	-12.0 - +12.0	(40 - 88)		2
5	Direction	Up, Down	(0 - 1)		
6	Type	High, Mid, Low, Bass	(0 - 3)		
7	Overdrive	0.0dB - +40.0dB	(0 - 80)		
8	Output	-20.0dB - +10.0dB	(24 - 84)		3
9	---				
10	---				
11	Attack Offset	-5 - +5	(59 - 69)		
12	---				
13	---				
14	---				
15	---				
16	---				

When the value of Bottom is greater than Top, the sound will not be modulated and only the Bottom value is available.

RING MODULATOR

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	OSC Frequency Coarse	0.5Hz - 5kHz	(0 - 127)	17	2
2	OSC Frequency Fine	0 - 127	(0 - 127)		
3	LFO Wave	Tri, Sine	(0 - 1)		
4	LFO Depth	0 - 127	(0 - 127)		3
5	LFO Speed	0.0Hz - 39.70Hz	(0 - 127)	1	
6	HPF Cutoff Frequency	20Hz - 8.0kHz	(0 - 52)	3	
7	LPF Cutoff Frequency	1.0kHz - 20.0kHz	(34 - 60)	3	
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	Modulator Input Level	-∞dB - 0dB - +24dB	(0 - 127)	45	
13 - 16 Same as the parameters shaded in gray in CROSS DELAY					

DYNAMIC RING MODULATOR

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Sensitivity	0 - 127	(0 - 127)		2
2	HPF Cutoff Frequency	20Hz - 8.0kHz	(0 - 52)	3	
3	LPF Cutoff Frequency	1.0kHz - 20.0kHz	(34 - 60)	3	
4	Attack Time	0.3ms - 227ms	(0 - 127)	15	
5	Release Time	2.6ms - 2171ms	(0 - 127)	16	
6	Release Curve	0 - 127	(0 - 127)		
7	Direction	Up, Down	(0 - 1)		
8	Dyna Threshold Level	0 - 127	(0 - 127)		3
9	Dyna Level Offset	0 - 127	(0 - 127)		
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	Side Chain Input Level	-∞dB - 0dB - +24dB	(0 - 127)	45	
13 - 16 Same as the parameters shaded in gray in CROSS DELAY					

SPIRALIZER P / SPIRALIZER F

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Spiral Speed	-39.7Hz - 0.00Hz - +39.7Hz	(1 - 255)	60	2
2	Filter Offset	C-2 - G8	(0 - 127)		
3	Feedback	0 - 127	(0 - 127)		3
4	Spiral Step Mode	Continuous, Semitone, Scale	(0 - 2)		
5	Spiral Step Semitones	1 semitones - 12 semitones	(0 - 11)		
6	Spiral Step Scale Type	Maj, Min(Natural), Min(Harmonic)	(0 - 2)		
7	Spiral Sync	Step, Octave	(0 - 1)		
8	Offset Transition Rate	1 - 62	(1 - 62)		
9	Spiral Step Transition Rate	1/48 - 1/2	(0 - 14)	61	
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	---				
13	---				
14	---				
15	---				
16	Spiral Switch	Off, On	(0 - 1)		

TECH MODULATION

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Mod Speed	0 - 127	(0 - 127)		2
2	Mod Depth	0 - 127	(0 - 127)		3
3	Mod Gain	-12 - +12dB	(52 - 76)		
4	Mod Mix Balance	D63>W - D=W - D<W63	(1 - 127)		
5	Pre Mod HPF Cutoff Frequency	20Hz - 8.0kHz	(0 - 52)	3	
6	Mod LPF Cutoff Frequency	1.0kHz - 20.0kHz	(34 - 60)	3	
7	Mod LPF Resonance	1.0 - 12.0	(10 - 120)		
8	Delay Time	0.1 - 740.0ms	(1 - 7400)		
9	Delay Time Offset R	0 - 884	(0 - 884)		
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	Feedback Level	0 - 63	(64 - 127)		
12	FB Level Offset R	-63 - +63	(1 - 127)		
13	Feedback High Damp	0.1 - 1.0	(1 - 10)		
14	FB Hi Damp Offset R	-0.9 - +0.9	(1 - 19)		
15	---				
16	---				

TEMPO SPIRALIZER P / TEMPO SPIRALIZER F

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Spiral Speed	32nd/3 - 4thx6	(0 - 19)	13	2
2	Filter Offset	C-2 - G8	(0 - 127)		
3	Feedback	0 - 127	(0 - 127)		3
4	Spiral Step Mode	Continuous, Semitone, Scale	(0 - 2)		
5	Spiral Step Semitones	1 semitones - 12 semitones	(0 - 11)		
6	Spiral Step Scale Type	Maj, Min(Natural), Min(Harmonic)	(0 - 2)		
7	Spiral Sync	Step, Octave	(0 - 1)		
8	Offset Transition Rate	1 - 62	(1 - 62)		
9	Spiral Step Transition Rate	1/48 - 1/2	(0 - 14)	61	
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	---				
13	---				
14	---				
15	Direction	Up, Down	(0 - 1)		
16	Spiral Switch	Off, On	(0 - 1)		

**OTHER**

**ROTARY SPEAKER 1**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Rotor Speed Slow	0.0Hz - 2.65Hz	(0 - 63)	1	
2	Horn Speed Slow	0.0Hz - 2.65Hz	(0 - 63)	1	
3	Rotor Speed Fast	2.69Hz - 39.70Hz	(64 - 127)	1	
4	Horn Speed Fast	2.69Hz - 39.70Hz	(64 - 127)	1	
5	Slow-Fast Time of Rotor	0 - 127	(0 - 127)		
6	Slow-Fast Time of Horn	0 - 127	(0 - 127)		
7	Drive Rotor	0 - 127	(0 - 127)		
8	Drive Horn	0 - 127	(0 - 127)		
9	Rotor/ Horn Balance	R63>H - R=H - R<H63	(1 - 127)		2
10	---				
11 - 14 Same as the parameters shaded in gray in CROSS DELAY					
15	Mic L-R Angle	0deg - 180deg	(0 - 60)		3
16	Speed Control	Slow, Fast	(0 - 1)		1

**ROTARY SPEAKER 2**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Speed Control	Slow, Fast	(0 - 1)		1
2	Drive	0.0 - 10.0	(0 - 100)		
3	Tone	0.0 - 10.0	(0 - 100)		
4	Rotor/ Horn Balance	R63>H - R=H - R<H63	(1 - 127)		2
5	Output Level	0 - 127	(0 - 127)		
6	Mic L-R Angle	0deg, 90deg, 120deg, 180deg	(0 - 3)		
7	Input Level	-6dB - 0dB - +6dB	(52 - 76)		
8	Modulation Depth	0 - 63	(0 - 63)		3
9	---				
10	---				
11	Slow-Fast Time of Horn	x0.21 - x1.00 - x2.00	(14 - 127)	49	
12	Fast-Slow Time of Horn	x0.21 - x1.00 - x2.00	(14 - 127)	49	
13	Rotor Speed Slow	0.0rpm - 88.3rpm	(0 - 127)	56	
14	Horn Speed Slow	0.0rpm - 89.6rpm	(0 - 127)	57	
15	Rotor Speed Fast	189.3rpm - 736.8rpm	(1 - 127)	58	
16	Horn Speed Fast	209.4rpm - 817.6rpm	(1 - 127)	59	
17	Slow-Fast Time of Rotor	x0.21 - x1.00 - x2.00	(14 - 127)	49	
18	Fast-Slow Time of Rotor	x0.21 - x1.00 - x2.00	(14 - 127)	49	

**DYNAMIC FILTER**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Filter Type	LPF(12dB), LPF(18dB), LPF(24dB), HPF, BPF, BEF	(0 - 5)		
2	Sensitivity	0 - 127	(0 - 127)		2
3	Dyna Level Offset	0 - 127	(0 - 127)		
4	Resonance	-16 - +111	(0 - 127)		3
5	Attack Time	0.3ms - 227ms	(0 - 127)	15	
6	Release Time	2.6ms - 2171ms	(0 - 127)	16	
7	Release Curve	0 - 127	(0 - 127)		
8	Direction	Up, Down	(0 - 1)		
9	Dyna Threshold Level	0 - 127	(0 - 127)		
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	Side Chain Input Level	-∞dB - 0dB - +24dB	(0 - 127)	45	
13 - 16 Same as the parameters shaded in gray in CROSS DELAY					

**AUTO SYNTH**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Mod Speed	0 - 127	(0 - 127)		
2	Mod Wave Type	TypeA, TypeB, TypeC, TypeD	(0 - 3)		
3	Mod Depth	0 - 127	(0 - 127)		1
4	Mod Depth Offset R	-63 - +63	(1 - 127)		
5	HPF Cutoff Frequency	20Hz - 8.0kHz	(0 - 52)	3	
6	LPF Cutoff Frequency	1.0kHz - 20.0kHz	(34 - 60)	3	
7	Delay Time	0.1ms - 370.0ms	(1 - 3700)		
8	Delay Time Offset R	0 - 884	(0 - 884)		
9	Delay Level	0 - 127	(0 - 127)		3
10	Dry Mix Level	0 - 127	(0 - 127)		
11	Feedback Level	0 - 63	(64 - 127)		
12	FB Level Offset R	-63 - +63	(1 - 127)		
13	AM Speed	0.00Hz - 39.7Hz	(0 - 127)	1	
14	AM Wave	Tri, Sine, Saw Up, Saw Down	(0 - 3)		
15	AM Depth	0 - 127	(0 - 127)		2
16	AM Inverse R	Normal, Inverse	(0 - 1)		

ISOLATOR

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	On/Off Switch	Off, On	(0 - 1)		
2	Low Level	-64 - +63	(0 - 127)		1
3	Mid Level	-64 - +63	(0 - 127)		2
4	High Level	-64 - +63	(0 - 127)		3
5	Low Mute	Off, On	(0 - 1)		
6	Mid Mute	Off, On	(0 - 1)		
7	High Mute	Off, On	(0 - 1)		
8	---				
9	---				
10	---				
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

VINYL BREAK

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Break	Off, On	(0 - 1)		1
2	Speed	Fast, Middle, Slow, Vinyl Stop, Power Off	(0 - 4)		2
3	Speed Adjust	+30% - -30%	(0 - 120)		3
4	---				
5	---				
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		
11	Output Level	-19.5dB - +12dB	(1 - 127)	47	
12	---				
13	---				
14	---				
15	---				
16	---				

SLICE

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Divide Type	16th - 4th	(5 - 11)	13	3
2	Gate Time	0 - 100%	(0 - 100)		2
3	Pan AEG Type	A - E	(0 - 4)		
4	Pan AEG Min Level	0 - 127	(0 - 127)		
5	Pan Depth	-63 - +63	(1 - 127)		
6	Divide Min Level	0 - 127	(0 - 127)		
7	Pan Type	A - J	(0 - 9)		
8	Drive	0 - 127	(0 - 127)		
9	AEG Phase	0 - 15(×16th note)	(0 - 15)		
10	Dry/Wet Balance	D63>W - D=W - W - D<W63	(1 - 127)		1
11	Phase Reset	Off(free run), KeyOnReset, SEQ Start Reset	(0 - 2)		
12	---				
13 - 16 Same as the parameters shaded in gray in CROSS DELAY					

BEAT REPEAT

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Repeat	Off, On	(0 - 1)		1
2	Length	1/256 - 1/1	(0 - 8)	48	1
3	Freeze	Off, On	(0 - 1)		
4	Gate Time	1 - 100%	(1 - 100)		2
5	Attack Time	0 - 100%	(0 - 100)		
6	Release Time	0 - 100%	(0 - 100)		
7	Play Speed	0.0 - +1.0	(65 - 127)		3
8	Pitch Sweep	-63 - +63	(1 - 127)		
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		
11	Filter Type	THRU, LPF, HPF	(0 - 2)		
12	Cutoff	14.1Hz - 21.1kHz	(0 - 127)	46	
13	Resonance	0.0 - 12.7	(0 - 127)		
14	Output Level	-19.5dB - +12dB	(1 - 127)	47	
15	---				
16	---				

This effect does not work properly below BPM42.



VCM EQ 501

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	EQ1(LSH) Frequency	31.5Hz - 2.0kHz	(12 - 84)	28	
2	EQ1(LSH) Gain	-12.0dB - +12.0dB	(60 - 300)		1
3	EQ2 Q	0.50 - 16.00	(0 - 60)	29	
4	EQ2 Frequency	50.0Hz - 20.0kHz	(20 - 124)	28	
5	EQ2 Gain	-18.0dB - +18.0dB	(0 - 360)		
6	EQ3 Q	0.50 - 16.00	(0 - 60)	29	
7	EQ3 Frequency	50.0Hz - 20.0kHz	(20 - 124)	28	
8	EQ3 Gain	-18.0dB - +18.0dB	(0 - 360)		2
9	EQ4 Q	0.50 - 16.00	(0 - 60)	29	
10	EQ4 Frequency	50.0Hz - 20.0kHz	(20 - 124)	28	
11	EQ4 Gain	-18.0dB - +18.0dB	(0 - 360)		
12	EQ5(HSH) Frequency	500Hz - 20.0kHz	(60 - 124)	28	
13	EQ5(HSH) Gain	-12.0dB - +12.0dB	(60 - 300)		3
14	Output Level	-12.0dB - +12.0dB	(60 - 300)		
15	---				
16	---				

HARMONIC ENHANCER

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	HPF Cutoff Frequency	500Hz - 16.0kHz	(28 - 58)	3	3
2	Drive	0 - 127	(0 - 127)		2
3	Mix Level	0 - 127	(0 - 127)		1
4	---				
5	---				
6	---				
7	---				
8	---				
9	---				
10	---				
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

PRESENCE

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Presence	0 - 100	(0 - 100)		1
2	Texture	0 - 100	(0 - 100)		2
3	Output Level	-6dB - +6dB	(0 - 120)		3
4	---				
5	---				
6	---				
7	---				
8	---				
9	---				
10	---				
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

STEREOPHONIC OPTIMIZER

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Low Subband Gain Lch	-14.00dB - 6.00dB	(5801 - 7801)		
2	Low Subband Gain Rch	-14.00dB - 6.00dB	(5801 - 7801)		
3	Mid1 Subband Gain Lch	-14.00dB - 6.00dB	(5801 - 7801)		
4	Mid1 Subband Gain Rch	-14.00dB - 6.00dB	(5801 - 7801)		
5	Mid2 Subband Gain Lch	-14.00dB - 6.00dB	(5801 - 7801)		
6	Mid2 Subband Gain Rch	-14.00dB - 6.00dB	(5801 - 7801)		
7	Mid3 Subband Gain Lch	-14.00dB - 6.00dB	(5801 - 7801)		
8	Mid3 Subband Gain Rch	-14.00dB - 6.00dB	(5801 - 7801)		
9	High Subband Gain Lch	-14.00dB - 6.00dB	(5801 - 7801)		
10	High Subband Gain Rch	-14.00dB - 6.00dB	(5801 - 7801)		
11	Width Low	0.00 - 1.00	(0 - 100)		1
12	Width Mid1	0.00 - 1.00	(0 - 100)		
13	Width Mid2	0.00 - 1.00	(0 - 100)		2
14	Width Mid3	0.00 - 1.00	(0 - 100)		
15	Width High	0.00 - 1.00	(0 - 100)		3
16	On/Off Switch	Off - On	(0 - 1)		

TALKING MODULATOR

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Vowel	a, i, u, e, o	(0 - 4)		1
2	Move Speed	1 - 62	(1 - 62)		2
3	Drive	0 - 127	(0 - 127)		3
4	Output Level	0 - 127	(0 - 127)		
5	---				
6	---				
7	---				
8	---				
9	---				
10	---				
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

DAMPER RESONANCE

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	---				
2	---				
3	---				
4	---				
5	---				
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	---				
12	---				
13	---				
14	---				
15	---				
16	Damper Control	0 - 127	(0 - 127)		2, 3

VCM MINI BOOSTER

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	EQ Frequency	0.00 - 100.00	(0 - 10000)		2
2	Resonance	0.0 - 1.0	(0 - 500)		3
3	Gain	0.0 - 20.0dB	(0 - 100)		1
4	Type	Low Shelf, High Shelf	(0 - 1)		
5	Texture	Retro, Standard, Modern	(0 - 2)		
6	---				
7	---				
8	---				
9	Input Level	-36 - +24dB	(0 - 120)		
10	---				
11	Output Level	-40 - +20dB	(0 - 120)		
12	---				
13	---				
14	---				
15	---				
16	---				

PITCH CHANGE

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Pitch 1	-24 - +24	(40 - 88)		2
2	Fine 1	-50 - +50	(14 - 114)		
3	Initial Delay 1	0.1ms - 400.0ms	(0 - 127)	7	
4	Feedback Level 1	0 - 63	(64 - 127)		
5	Pitch 2	-24 - +24	(40 - 88)		3
6	Fine 2	-50 - +50	(14 - 114)		
7	Initial Delay 2	0.1ms - 400.0ms	(0 - 127)	7	
8	Feedback Level 2	0 - 63	(64 - 127)		
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		1
11	Pan 1	L63 - C - R63	(1 - 127)		
12	Output Level1	0 - 127	(0 - 127)		
13	Pan 2	L63 - C - R63	(1 - 127)		
14	Output Level2	0 - 127	(0 - 127)		
15	---				
16	---				

NOISE GATE+COMP+EQ

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Comp Attack	1ms - 40ms	(0 - 19)	8	
2	Comp Release	10ms - 680ms	(0 - 15)	9	
3	Comp Threshold	-48dB - -6dB	(79 - 121)		3
4	Comp Ratio	1.0 - 20.0	(0 - 7)	10	2
5	Comp Output Level	0 - 127	(0 - 127)		
6 - 9 Same as the parameters shaded in gray in CROSS DELAY					
10	---				
11	Noise Gate Attack	1ms - 40ms	(0 - 19)		
12	Noise Gate Release	10ms - 680ms	(0 - 15)		
13	Noise Gate Threshold	-73dB - -30dB	(54 - 97)		1
14	EQ Mid Frequency	100Hz - 10.0kHz	(14 - 54)	3	
15	EQ Mid Gain	-12dB - +12dB	(52 - 76)		
16	EQ Mid Width	0.1 - 12.0	(1 - 120)		

## Single EQ Block

### 2 Band EQ

No.	Parameter	Range	Value	Data Assign Table No.
1	EQ1 Type	Thru, LPF (-6dB/oct), HPF (-6dB/oct), Low Shelving, Hi Shelving, Peak/Dip	0 - 5	
2	EQ1 Freq	63Hz - 18.0Hz	48 - 244	39
3	EQ1 Gain	-12dB - 0dB - +12dB	40 - 64 - 88	
4	EQ1 Q	0.1 - 12.0	1 - 120	
5	EQ2 Type	Thru, LPF (-6dB/oct), HPF (-6dB/oct), Low Shelving, Hi Shelving, Peak/Dip	0 - 5	
6	EQ2 Freq	63Hz - 18.0Hz	48 - 244	39
7	EQ2 Gain	-12dB - 0dB - +12dB	40 - 64 - 88	
8	EQ2 Q	0.1 - 12.0	1 - 120	
9	Output Gain	-12dB - 0dB - +12dB	40 - 64 - 88	

## Master EQ Block

### Master EQ

No.	Parameter	Range	Value	Data Assign Table No.
1	EQ1 Gain	-12dB - +12dB	52 - 76	
2	EQ1 Frequency	32Hz - 2.0kHz	4 - 40	3
3	EQ1 Q	0.1 - 12.0	1 - 120	
4	EQ1 Shape	Shelving, Peaking	0 - 1	
5	EQ2 Gain	-12dB - +12dB	52 - 76	
6	EQ2 Frequency	100Hz - 10kHz	14 - 54	3
7	EQ2 Q	0.1 - 12.0	1 - 120	
8	---			
9	EQ3 Gain	-12dB - +12dB	52 - 76	
10	EQ3 Frequency	100Hz - 10kHz	14 - 54	3
11	EQ3 Q	0.1 - 12.0	1 - 120	
12	---			
13	EQ4 Gain	-12dB - +12dB	52 - 76	
14	EQ4 Frequency	100Hz - 10kHz	14 - 54	3
15	EQ4 Q	0.1 - 12.0	1 - 120	
16	---			
17	EQ5 Gain	-12dB - +12dB	52 - 76	
18	EQ5 Frequency	500Hz - 16kHz	28 - 58	3
19	EQ5 Q	0.1 - 12.0	1 - 120	
20	EQ5 Shape	Shelving, Peaking	0 - 1	

## Send Effect Block

### REVERB

#### SPX HALL, SPX ROOM, SPX STAGE

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Reverb Time	0.3s - 30.0s	(0 - 69)	4	1
2	Diffusion	0 - 10	(0 - 10)		2
3	Initial Delay	0.1ms - 99.3ms	(0 - 63)	5	
4	HPF Cutoff Frequency	20Hz - 8.0kHz	(0 - 52)	3	
5	LPF Cutoff Frequency	1.0kHz - 20.0kHz	(34 - 60)	3	3
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		
11	Reverb Delay	0.1ms - 99.3ms	(0 - 63)	5	
12	Density	0 - 4	(0 - 4)		
13	ER/Rev Balance	E63>R - E=R - E<R63	(1 - 127)		
14	Feedback High Damp	0.1 - 1.0	(1 - 10)		
15	Feedback Level	0 - 63	(64 - 127)		
16	---				

#### HD PLATE

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Reverb Time	0.3s - 30.0s	(0 - 69)	4	1
2	Plate Type	1 - 3	(0 - 2)		2
3	Initial Delay	0.1ms - 200.0ms	(0 - 127)	5	
4	High Damp Frequency	1.0kHz - 20.0kHz	(34 - 60)	3	3
5	---				
6	High Ratio	0.0 - 1.0	(0 - 10)		
7	---				
8	---				
9	---				
10	---				
11	---				
12	---				
13	EQ Low Frequency	22Hz - 1.0kHz	(1 - 34)	3	
14	EQ Low Gain	-12dB - 0dB - +12dB	(52 - 76)		
15	EQ High Frequency	500Hz - 18.0kHz	(28 - 59)	3	
16	EQ High Gain	-12dB - 0dB - +12dB	(52 - 76)		

#### HD HALL, HD ROOM

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Reverb Time	0.3s - 30.0s	(0 - 69)	4	1
2	Room Size	0 - 4	(0 - 4)		2
3	Initial Delay	0.1ms - 200.0ms	(0 - 127)	5	
4	High Damp Frequency	1.0kHz - 20.0kHz	(34 - 60)	3	3
5	---				
6	High Ratio	0.0 - 1.0	(0 - 10)		
7	---				
8	---				
9	---				
10	---				
11	---				
12	---				
13	EQ Low Frequency	22Hz - 1.0kHz	(1 - 34)	3	
14	EQ Low Gain	-12dB - 0dB - +12dB	(52 - 76)		
15	EQ High Frequency	500Hz - 18.0kHz	(28 - 59)	3	
16	EQ High Gain	-12dB - 0dB - +12dB	(52 - 76)		

#### REV-X HALL, REV-X ROOM

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Reverb Time	0.3s - 18.0s	(0 - 69)	23/24	1
2	Diffusion	0 - 10	(0 - 10)		
3	Initial Delay	0.1ms - 200.0ms	(0 - 127)	5	
4	HPF Cutoff Frequency	20Hz - 8.0kHz	(0 - 52)	3	
5	LPF Cutoff Frequency	1.0kHz - 20.0kHz	(34 - 60)	3	3
6	Room Size	0 - 31	(0 - 31)		2
7	High Ratio	0.1 - 1.0	(1 - 10)		
8	Low Ratio	0.1 - 1.4	(1 - 14)		
9	Decay	0 - 63	(0 - 63)		
10	---				
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

## R3 HALL, R3 ROOM, R3 PLATE

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Reverb Time	0.3s - 30.0s	(0 - 69)	4	1
2	Diffusion	0 - 10	(0 - 10)		2
3	Initial Delay	0.1ms - 200.0ms	(0 - 127)	5	
4	HPF Cutoff Frequency	20Hz - 8.0kHz	(0 - 52)	3	
5	LPF Cutoff Frequency	1.0kHz -20.0kHz	(34 - 60)	3	3
6	---				
7	---				
8	---				
9	---				
10	---				
11	Reverb Delay	0.1ms - 200.0ms	(0 - 127)	5	
12	Density	0 - 4	(0 - 4)		
13	ER/Rev Balance	E63>R - E=R - E<R63	(1 - 127)		
14	Feedback High Damp	0.1 - 1.0	(1 - 10)		
15	Feedback Level	0 - 63	(64 - 127)		
16	---				

## SPACE SIMULATOR

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Reverb Time	0.3s - 30.0s	(0 - 69)	4	1
2	Diffusion	0 - 10	(0 - 10)		2
3	Initial Delay	0.1ms - 200.0ms	(0 - 127)	5	
4	HPF Cutoff Frequency	20Hz - 8.0kHz	(0 - 52)	3	
5	LPF Cutoff Frequency	1.0kHz -20.0kHz	(34 - 60)	3	3
6	Width	0.5m - 30.2m	(0 - 104)	11	
7	Height	0.5m - 30.2m	(0 - 104)	11	
8	Depth	0.5m - 30.2m	(0 - 104)	11	
9	Wall Vary	0 - 30	(0 - 30)		
10	---				
11	Reverb Delay	0.1ms - 200.0ms	(0 - 127)	5	
12	Density	0 - 4	(0 - 4)		
13	ER/Rev Balance	E63>R - E=R - E<R63	(1 - 127)		
14	Feedback High Damp	0.1 - 1.0	(1 - 10)		
15	Feedback Level	0 - 63	(64 - 127)		
16	Space Type	1 - 2	(0-1)		

**DELAY**

**CROSS DELAY**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time L>R	0.1ms - 1638.3ms	(1 - 16383)		1
2	Delay Time R>L	0.1ms - 1638.3ms	(1 - 16383)		1
3	Feedback Level	0 - 63	(64 - 127)		2
4	Input Select	L, R, L&R, L-MODE2, R-MODE2	(0 - 4)		
5	Feedback High Damp	0.1 - 1.0	(1 - 10)		3
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		
11	---				
12	---				
13	EQ Low Frequency	32Hz - 2.0kHz	(4 - 40)	3	
14	EQ Low Gain	-12dB - +12dB	(52 - 76)		
15	EQ High Frequency	500Hz - 16.0kHz	(28 - 58)	3	
16	EQ High Gain	-12dB - +12dB	(52 - 76)		

**TEMPO CROSS DELAY**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time L>R	32nd/3 - 4thx6	(0 - 19)	13	1
2	Delay Time R>L	32nd/3 - 4thx6	(0 - 19)	13	1
3	Feedback Level	0 - 63	(64 - 127)		2
4	Input Select	L, R, L&R, L-MODE2, R-MODE2	(0 - 4)		
5	Feedback High Damp	0.1 - 1.0	(1 - 10)		3
6	Lag	-63ms - +63ms	(1 - 127)		
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		
11	---				
12	---				
13 - 16 Same as the parameters shaded in gray in CROSS DELAY					

**TEMPO DELAY MONO**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time	32nd/3 - 4thx6	(0 - 19)	13	1
2	Feedback Level	0 - 63	(64 - 127)		2
3	Feedback High Damp	0.1 - 1.0	(1 - 10)		3
4	L/R Diffusion	-63ms - +63ms	(1 - 127)		
5	Lag	-63ms - +63ms	(1 - 127)		
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		
11	---				
12	---				
13 - 16 Same as the parameters shaded in gray in CROSS DELAY					

**TEMPO DELAY STEREO**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time	32nd/3 - 4thx6	(0 - 19)	13	1
2	Feedback Level	0 - 63	(64 - 127)		2
3	Feedback High Damp	0.1 - 1.0	(1 - 10)		3
4	L/R Diffusion	-63ms - +63ms	(1 - 127)		
5	Lag	-63ms - +63ms	(1 - 127)		
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		
11	---				
12	---				
13 - 16 Same as the parameters shaded in gray in CROSS DELAY					

**CONTROL DELAY**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time	0.1ms - 1486.0ms	(1 - 14860)		1
2	Delay Transition Rate	1 - 48	(1 - 48)		
3	Feedback Level	0 - 63	(64 - 127)		2
4	Feedback High Damp	0.1 - 1.0	(1 - 10)		3
5	---				
6 - 9 Same as the parameters shaded in gray in CROSS DELAY					
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

**DELAY LR**

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time L	0.1ms - 1638.3ms	(1 - 16383)		1
2	Delay Time R	0.1ms - 1638.3ms	(1 - 16383)		1
3	Feedback Time L	0.1ms - 1638.3ms	(1 - 16383)		
4	Feedback Time R	0.1ms - 1638.3ms	(1 - 16383)		
5	Feedback Level	0 - 63	(64 - 127)		2
6	Feedback High Damp	0.1 - 1.0	(1 - 10)		3
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		
11	---				
12	---				
13 - 16 Same as the parameters shaded in gray in CROSS DELAY					

DELAY LCR

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time L	0.1ms - 1638.3ms	(1 - 16383)		1
2	Delay Time R	0.1ms - 1638.3ms	(1 - 16383)		1
3	Delay Time C	0.1ms - 1638.3ms	(1 - 16383)		1
4	Feedback Time	0.1ms - 1638.3ms	(1 - 16383)		
5	Feedback Level	0 - 63	(64 - 127)		2
6	Delay Level C	0 - 127	(0 - 127)		
7	Feedback High Damp	0.1 - 1.0	(1 - 10)		3
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		
11	---				
12	---				
13 - 16 Same as the parameters shaded in gray in CROSS DELAY					

ANALOG DELAY RETRO

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time	25ms - 800ms	(0 - 127)	41	1
2	Feedback Level	0 - 127	(0 - 127)		2
3	Delay Input Level	0 - 127	(0 - 127)		3
4	Type	Mellow, Dub, Narrow, Soft, Dark	(0 - 4)	43	
5	---				
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

ANALOG DELAY MODERN

No.	Parameter	Range	Value	Data Assign Table No.	Default Slider Assign No.
1	Delay Time	50ms - 1.0s	(0 - 127)	42	1
2	Feedback Level	0 - 127	(0 - 127)		2
3	Delay Input Level	0 - 127	(0 - 127)		3
4	Type	Urban, Dub, Narrow, Soft, Dark	(0 - 4)	44	
5	---				
6	---				
7	---				
8	---				
9	---				
10	Dry/Wet Balance	D63>W - D=W - D<W63	(1 - 127)		
11	---				
12	---				
13	---				
14	---				
15	---				
16	---				

















# Effect Data Assign Table

**Table #41**  
Delay Time (short)

Data	Value	Data	Value
0	25.0ms	64	143.4ms
1	25.7ms	65	147.3ms
2	26.4ms	66	151.4ms
3	27.1ms	67	155.6ms
4	27.9ms	68	159.9ms
5	28.7ms	69	164.3ms
6	29.4ms	70	168.9ms
7	30.3ms	71	173.5ms
8	31.1ms	72	178.3ms
9	32.0ms	73	183.3ms
10	32.8ms	74	188.3ms
11	33.8ms	75	193.6ms
12	34.7ms	76	198.9ms
13	35.6ms	77	204.4ms
14	36.6ms	78	210.1ms
15	37.6ms	79	215.9ms
16	38.7ms	80	221.9ms
17	39.8ms	81	228.0ms
18	40.9ms	82	234.3ms
19	42.0ms	83	240.8ms
20	43.1ms	84	247.4ms
21	44.3ms	85	254.3ms
22	45.6ms	86	261.3ms
23	46.8ms	87	268.6ms
24	48.1ms	88	276.0ms
25	49.5ms	89	283.6ms
26	50.8ms	90	291.5ms
27	52.2ms	91	299.5ms
28	53.7ms	92	307.8ms
29	55.2ms	93	316.3ms
30	56.7ms	94	325.1ms
31	58.3ms	95	334.1ms
32	59.9ms	96	343.3ms
33	61.5ms	97	352.8ms
34	63.2ms	98	362.6ms
35	65.0ms	99	372.6ms
36	66.8ms	100	382.9ms
37	68.6ms	101	393.5ms
38	70.5ms	102	404.4ms
39	72.5ms	103	415.6ms
40	74.5ms	104	427.1ms
41	76.5ms	105	438.9ms
42	78.7ms	106	451.0ms
43	80.8ms	107	463.5ms
44	83.1ms	108	476.3ms
45	85.4ms	109	489.5ms
46	87.7ms	110	503.1ms
47	90.1ms	111	517.0ms
48	92.6ms	112	531.3ms
49	95.2ms	113	546.0ms
50	97.8ms	114	561.1ms
51	100.5ms	115	576.6ms
52	103.3ms	116	592.5ms
53	106.2ms	117	608.9ms
54	109.1ms	118	625.8ms
55	112.1ms	119	643.1ms
56	115.2ms	120	660.9ms
57	118.4ms	121	679.2ms
58	121.7ms	122	698.0ms
59	125.1ms	123	717.3ms
60	128.5ms	124	737.1ms
61	132.1ms	125	757.5ms
62	135.7ms	126	778.5ms
63	139.5ms	127	800.0ms

**Table #42**  
Delay Time (long)

Data	Value	Data	Value
0	50.0ms	64	226.3ms
1	51.2ms	65	231.7ms
2	52.4ms	66	237.2ms
3	53.7ms	67	242.9ms
4	54.9ms	68	248.6ms
5	56.3ms	69	254.6ms
6	57.6ms	70	260.7ms
7	59.0ms	71	266.9ms
8	60.4ms	72	273.3ms
9	61.8ms	73	279.8ms
10	63.3ms	74	286.5ms
11	64.8ms	75	293.3ms
12	66.4ms	76	300.3ms
13	67.9ms	77	307.5ms
14	69.6ms	78	314.8ms
15	71.2ms	79	322.3ms
16	72.9ms	80	330.0ms
17	74.7ms	81	337.9ms
18	76.4ms	82	345.9ms
19	78.3ms	83	354.2ms
20	80.1ms	84	362.7ms
21	82.1ms	85	371.3ms
22	84.0ms	86	380.2ms
23	86.0ms	87	389.2ms
24	88.1ms	88	398.5ms
25	90.2ms	89	408.1ms
26	92.3ms	90	417.8ms
27	94.5ms	91	427.8ms
28	96.8ms	92	438.0ms
29	99.1ms	93	448.4ms
30	101.5ms	94	459.1ms
31	103.9ms	95	470.1ms
32	106.4ms	96	481.3ms
33	108.9ms	97	492.8ms
34	111.5ms	98	504.6ms
35	114.2ms	99	516.6ms
36	116.9ms	100	528.9ms
37	119.7ms	101	541.6ms
38	122.5ms	102	554.5ms
39	125.5ms	103	567.7ms
40	128.5ms	104	581.3ms
41	131.5ms	105	595.1ms
42	134.7ms	106	609.4ms
43	137.9ms	107	623.9ms
44	141.2ms	108	638.8ms
45	144.5ms	109	654.0ms
46	148.0ms	110	669.6ms
47	151.5ms	111	685.6ms
48	155.1ms	112	702.0ms
49	158.8ms	113	718.8ms
50	162.6ms	114	735.9ms
51	166.5ms	115	753.5ms
52	170.5ms	116	771.5ms
53	174.5ms	117	789.9ms
54	178.7ms	118	808.7ms
55	183.0ms	119	828.0ms
56	187.3ms	120	847.8ms
57	191.8ms	121	868.0ms
58	196.4ms	122	888.7ms
59	201.1ms	123	910.0ms
60	205.9ms	124	931.7ms
61	210.8ms	125	953.9ms
62	215.8ms	126	976.7ms
63	221.0ms	127	1000.0ms

**Table #43**  
Analog Delay Retro

Data	Value
0	Mellow
1	Dub
2	Narrow
3	Soft
4	Dark

**Table #44**  
Analog Delay Modern

Data	Value
0	Urban
1	Dub
2	Narrow
3	Soft
4	Dark









## Effect Data Assign Table

**Table #57**  
**Rotary Speaker 2 Speed Slow Horn**

Data	Value	Data	Value
0	0.0rpm	64	45.4rpm
1	23.0rpm	65	46.1rpm
2	23.3rpm	66	46.7rpm
3	23.7rpm	67	47.3rpm
4	24.0rpm	68	47.9rpm
5	24.3rpm	69	48.6rpm
6	24.6rpm	70	49.2rpm
7	24.9rpm	71	49.8rpm
8	25.2rpm	72	50.5rpm
9	25.5rpm	73	51.1rpm
10	25.9rpm	74	51.7rpm
11	26.2rpm	75	52.4rpm
12	26.5rpm	76	53.0rpm
13	26.8rpm	77	53.6rpm
14	27.1rpm	78	54.3rpm
15	27.4rpm	79	54.9rpm
16	27.8rpm	80	55.5rpm
17	28.1rpm	81	56.1rpm
18	28.4rpm	82	56.8rpm
19	28.7rpm	83	57.4rpm
20	29.0rpm	84	58.0rpm
21	29.3rpm	85	58.7rpm
22	29.7rpm	86	59.3rpm
23	30.0rpm	87	59.9rpm
24	30.3rpm	88	60.6rpm
25	30.6rpm	89	61.2rpm
26	30.9rpm	90	61.8rpm
27	31.2rpm	91	62.5rpm
28	31.5rpm	92	63.1rpm
29	31.9rpm	93	63.7rpm
30	32.2rpm	94	64.3rpm
31	32.5rpm	95	65.0rpm
32	32.8rpm	96	65.6rpm
33	33.1rpm	97	66.2rpm
34	33.4rpm	98	66.9rpm
35	33.8rpm	99	67.5rpm
36	34.1rpm	100	68.1rpm
37	34.4rpm	101	68.8rpm
38	34.7rpm	102	69.4rpm
39	35.0rpm	103	70.0rpm
40	35.3rpm	104	70.7rpm
41	35.6rpm	105	71.3rpm
42	36.0rpm	106	71.9rpm
43	36.3rpm	107	72.5rpm
44	36.6rpm	108	73.2rpm
45	36.9rpm	109	73.8rpm
46	37.2rpm	110	74.4rpm
47	37.5rpm	111	75.1rpm
48	37.9rpm	112	75.7rpm
49	38.2rpm	113	76.3rpm
50	38.5rpm	114	77.0rpm
51	38.8rpm	115	77.6rpm
52	39.1rpm	116	78.2rpm
53	39.4rpm	117	78.9rpm
54	39.7rpm	118	79.5rpm
55	40.1rpm	119	80.1rpm
56	40.4rpm	120	80.7rpm
57	41.0rpm	121	82.0rpm
58	41.6rpm	122	83.3rpm
59	42.3rpm	123	84.5rpm
60	42.9rpm	124	85.8rpm
61	43.5rpm	125	87.1rpm
62	44.2rpm	126	88.3rpm
63	44.8rpm	127	89.6rpm

**Table #58**  
**Rotary Speaker 2 Speed Fast Woofer**

Data	Value	Data	Value
0	-	64	373.5rpm
1	189.3rpm	65	378.5rpm
2	191.8rpm	66	383.6rpm
3	194.3rpm	67	388.6rpm
4	196.8rpm	68	393.7rpm
5	199.4rpm	69	398.7rpm
6	201.9rpm	70	403.7rpm
7	204.4rpm	71	408.8rpm
8	206.9rpm	72	413.8rpm
9	209.4rpm	73	418.9rpm
10	212.0rpm	74	423.9rpm
11	214.5rpm	75	429.0rpm
12	217.0rpm	76	434.0rpm
13	219.5rpm	77	439.1rpm
14	222.1rpm	78	444.1rpm
15	224.6rpm	79	449.2rpm
16	227.1rpm	80	454.2rpm
17	229.6rpm	81	459.3rpm
18	232.2rpm	82	464.3rpm
19	234.7rpm	83	469.4rpm
20	237.2rpm	84	474.4rpm
21	239.7rpm	85	479.5rpm
22	242.2rpm	86	484.5rpm
23	244.8rpm	87	489.5rpm
24	247.3rpm	88	494.6rpm
25	249.8rpm	89	499.6rpm
26	252.3rpm	90	504.7rpm
27	254.9rpm	91	509.7rpm
28	257.4rpm	92	514.8rpm
29	259.9rpm	93	519.8rpm
30	262.4rpm	94	524.9rpm
31	265.0rpm	95	529.9rpm
32	267.5rpm	96	535.0rpm
33	270.0rpm	97	540.0rpm
34	272.5rpm	98	545.1rpm
35	275.1rpm	99	550.1rpm
36	277.6rpm	100	555.2rpm
37	280.1rpm	101	560.2rpm
38	282.6rpm	102	565.2rpm
39	285.1rpm	103	570.3rpm
40	287.7rpm	104	575.3rpm
41	290.2rpm	105	580.4rpm
42	292.7rpm	106	585.4rpm
43	295.2rpm	107	590.5rpm
44	297.8rpm	108	595.5rpm
45	300.3rpm	109	600.6rpm
46	302.8rpm	110	605.6rpm
47	305.3rpm	111	610.7rpm
48	307.9rpm	112	615.7rpm
49	310.4rpm	113	620.8rpm
50	312.9rpm	114	625.8rpm
51	315.4rpm	115	630.9rpm
52	318.0rpm	116	635.9rpm
53	320.5rpm	117	640.9rpm
54	323.0rpm	118	646.0rpm
55	328.0rpm	119	656.1rpm
56	333.1rpm	120	666.2rpm
57	338.1rpm	121	676.3rpm
58	343.2rpm	122	686.4rpm
59	348.2rpm	123	696.5rpm
60	353.3rpm	124	706.6rpm
61	358.3rpm	125	716.7rpm
62	363.4rpm	126	726.7rpm
63	368.4rpm	127	736.8rpm

**Table #59**  
**Rotary Speaker 2 Speed Fast Horn**

Data	Value	Data	Value
0	-	64	413.8rpm
1	209.4rpm	65	418.9rpm
2	212.0rpm	66	423.9rpm
3	214.5rpm	67	429.0rpm
4	217.0rpm	68	434.0rpm
5	219.5rpm	69	439.1rpm
6	222.1rpm	70	444.1rpm
7	224.6rpm	71	449.2rpm
8	227.1rpm	72	454.2rpm
9	229.6rpm	73	459.3rpm
10	232.2rpm	74	464.3rpm
11	234.7rpm	75	469.4rpm
12	237.2rpm	76	474.4rpm
13	239.7rpm	77	479.5rpm
14	242.2rpm	78	484.5rpm
15	244.8rpm	79	489.5rpm
16	247.3rpm	80	494.6rpm
17	249.8rpm	81	499.6rpm
18	252.3rpm	82	504.7rpm
19	254.9rpm	83	509.7rpm
20	257.4rpm	84	514.8rpm
21	259.9rpm	85	519.8rpm
22	262.4rpm	86	524.9rpm
23	265.0rpm	87	529.9rpm
24	267.5rpm	88	535.0rpm
25	270.0rpm	89	540.0rpm
26	272.5rpm	90	545.1rpm
27	275.1rpm	91	550.1rpm
28	277.6rpm	92	555.2rpm
29	280.1rpm	93	560.2rpm
30	282.6rpm	94	565.2rpm
31	285.1rpm	95	570.3rpm
32	287.7rpm	96	575.3rpm
33	290.2rpm	97	580.4rpm
34	292.7rpm	98	585.4rpm
35	295.2rpm	99	590.5rpm
36	297.8rpm	100	595.5rpm
37	300.3rpm	101	600.6rpm
38	302.8rpm	102	605.6rpm
39	305.3rpm	103	610.7rpm
40	307.9rpm	104	615.7rpm
41	310.4rpm	105	620.8rpm
42	312.9rpm	106	625.8rpm
43	315.4rpm	107	630.9rpm
44	318.0rpm	108	635.9rpm
45	320.5rpm	109	640.9rpm
46	323.0rpm	110	646.0rpm
47	328.0rpm	111	656.1rpm
48	333.1rpm	112	666.2rpm
49	338.1rpm	113	676.3rpm
50	343.2rpm	114	686.4rpm
51	348.2rpm	115	696.5rpm
52	353.3rpm	116	706.6rpm
53	358.3rpm	117	716.7rpm
54	363.4rpm	118	726.7rpm
55	368.4rpm	119	736.8rpm
56	373.5rpm	120	746.9rpm
57	378.5rpm	121	757.0rpm
58	383.6rpm	122	767.1rpm
59	388.6rpm	123	777.2rpm
60	393.7rpm	124	787.3rpm
61	398.7rpm	125	797.4rpm
62	403.7rpm	126	807.5rpm
63	408.8rpm	127	817.6rpm

# Effect Data Assign Table

**Table #60**  
Reversible LFO Frequency

Data	Value	Data	Value	Data	Value	Data	Value
0	-	64	-2.69Hz	128	0.00Hz	192	2.69Hz
1	-39.7Hz	65	-2.65Hz	129	0.04Hz	193	2.78Hz
2	-37.0Hz	66	-2.61Hz	130	0.08Hz	194	2.86Hz
3	-34.3Hz	67	-2.57Hz	131	0.13Hz	195	2.94Hz
4	-33.0Hz	68	-2.52Hz	132	0.17Hz	196	3.03Hz
5	-31.6Hz	69	-2.48Hz	133	0.21Hz	197	3.11Hz
6	-30.3Hz	70	-2.44Hz	134	0.25Hz	198	3.20Hz
7	-28.9Hz	71	-2.40Hz	135	0.29Hz	199	3.28Hz
8	-27.6Hz	72	-2.36Hz	136	0.34Hz	200	3.37Hz
9	-26.2Hz	73	-2.31Hz	137	0.38Hz	201	3.45Hz
10	-24.9Hz	74	-2.27Hz	138	0.42Hz	202	3.53Hz
11	-23.6Hz	75	-2.23Hz	139	0.46Hz	203	3.62Hz
12	-22.2Hz	76	-2.19Hz	140	0.51Hz	204	3.70Hz
13	-20.9Hz	77	-2.15Hz	141	0.55Hz	205	3.87Hz
14	-19.5Hz	78	-2.10Hz	142	0.59Hz	206	4.04Hz
15	-18.2Hz	79	-2.06Hz	143	0.63Hz	207	4.21Hz
16	-17.5Hz	80	-2.02Hz	144	0.67Hz	208	4.37Hz
17	-16.8Hz	81	-1.98Hz	145	0.72Hz	209	4.54Hz
18	-16.2Hz	82	-1.94Hz	146	0.76Hz	210	4.71Hz
19	-15.5Hz	83	-1.89Hz	147	0.80Hz	211	4.88Hz
20	-14.8Hz	84	-1.85Hz	148	0.84Hz	212	5.05Hz
21	-14.1Hz	85	-1.81Hz	149	0.88Hz	213	5.22Hz
22	-13.5Hz	86	-1.77Hz	150	0.93Hz	214	5.38Hz
23	-12.8Hz	87	-1.72Hz	151	0.97Hz	215	5.55Hz
24	-12.1Hz	88	-1.68Hz	152	1.01Hz	216	5.72Hz
25	-11.4Hz	89	-1.64Hz	153	1.05Hz	217	6.06Hz
26	-10.8Hz	90	-1.60Hz	154	1.09Hz	218	6.39Hz
27	-10.1Hz	91	-1.56Hz	155	1.14Hz	219	6.73Hz
28	-9.76Hz	92	-1.51Hz	156	1.18Hz	220	7.07Hz
29	-9.42Hz	93	-1.47Hz	157	1.22Hz	221	7.40Hz
30	-9.08Hz	94	-1.43Hz	158	1.26Hz	222	7.74Hz
31	-8.75Hz	95	-1.39Hz	159	1.30Hz	223	8.08Hz
32	-8.41Hz	96	-1.35Hz	160	1.35Hz	224	8.41Hz
33	-8.08Hz	97	-1.30Hz	161	1.39Hz	225	8.75Hz
34	-7.74Hz	98	-1.26Hz	162	1.43Hz	226	9.08Hz
35	-7.40Hz	99	-1.22Hz	163	1.47Hz	227	9.42Hz
36	-7.07Hz	100	-1.18Hz	164	1.51Hz	228	9.76Hz
37	-6.73Hz	101	-1.14Hz	165	1.56Hz	229	10.1Hz
38	-6.39Hz	102	-1.09Hz	166	1.60Hz	230	10.8Hz
39	-6.06Hz	103	-1.05Hz	167	1.64Hz	231	11.4Hz
40	-5.72Hz	104	-1.01Hz	168	1.68Hz	232	12.1Hz
41	-5.55Hz	105	-0.97Hz	169	1.72Hz	233	12.8Hz
42	-5.38Hz	106	-0.93Hz	170	1.77Hz	234	13.5Hz
43	-5.22Hz	107	-0.88Hz	171	1.81Hz	235	14.1Hz
44	-5.05Hz	108	-0.84Hz	172	1.85Hz	236	14.8Hz
45	-4.88Hz	109	-0.80Hz	173	1.89Hz	237	15.5Hz
46	-4.71Hz	110	-0.76Hz	174	1.94Hz	238	16.2Hz
47	-4.54Hz	111	-0.72Hz	175	1.98Hz	239	16.8Hz
48	-4.37Hz	112	-0.67Hz	176	2.02Hz	240	17.5Hz
49	-4.21Hz	113	-0.63Hz	177	2.06Hz	241	18.2Hz
50	-4.04Hz	114	-0.59Hz	178	2.10Hz	242	19.5Hz
51	-3.87Hz	115	-0.55Hz	179	2.15Hz	243	20.9Hz
52	-3.70Hz	116	-0.51Hz	180	2.19Hz	244	22.2Hz
53	-3.62Hz	117	-0.46Hz	181	2.23Hz	245	23.6Hz
54	-3.53Hz	118	-0.42Hz	182	2.27Hz	246	24.9Hz
55	-3.45Hz	119	-0.38Hz	183	2.31Hz	247	26.2Hz
56	-3.37Hz	120	-0.34Hz	184	2.36Hz	248	27.6Hz
57	-3.28Hz	121	-0.29Hz	185	2.40Hz	249	28.9Hz
58	-3.20Hz	122	-0.25Hz	186	2.44Hz	250	30.3Hz
59	-3.11Hz	123	-0.21Hz	187	2.48Hz	251	31.6Hz
60	-3.03Hz	124	-0.17Hz	188	2.52Hz	252	33.0Hz
61	-2.94Hz	125	-0.13Hz	189	2.57Hz	253	34.3Hz
62	-2.86Hz	126	-0.08Hz	190	2.61Hz	254	37.0Hz
63	-2.78Hz	127	-0.04Hz	191	2.65Hz	255	39.7Hz

**Table #61**  
LFO Step Transitional Rate

Data	Value
0	1/48
1	3/128
2	1/32
3	1/24
4	3/64
5	1/16
6	1/12
7	3/32
8	1/8
9	1/6
10	3/16
11	1/4
12	1/3
13	3/8
14	1/2



**Table #62**  
**Wave Folder LFO Speed**

Data	Value	Data	Value	Data	Value	Data	Value
711	37.726Hz	790	94.197Hz	869	235.20Hz	948	587.28Hz
712	38.165Hz	791	95.295Hz	870	237.94Hz	949	594.12Hz
713	38.610Hz	792	96.405Hz	871	240.71Hz	950	601.04Hz
714	39.059Hz	793	97.528Hz	872	243.52Hz	951	608.05Hz
715	39.515Hz	794	98.664Hz	873	246.36Hz	952	615.13Hz
716	39.975Hz	795	99.814Hz	874	249.23Hz	953	622.30Hz
717	40.441Hz	796	100.98Hz	875	252.13Hz	954	629.55Hz
718	40.912Hz	797	102.15Hz	876	255.07Hz	955	636.88Hz
719	41.388Hz	798	103.34Hz	877	258.04Hz	956	644.30Hz
720	41.871Hz	799	104.55Hz	878	261.05Hz	957	651.81Hz
721	42.358Hz	800	105.77Hz	879	264.09Hz	958	659.40Hz
722	42.852Hz	801	107.00Hz	880	267.16Hz	959	667.08Hz
723	43.351Hz	802	108.24Hz	881	270.28Hz	960	674.86Hz
724	43.856Hz	803	109.51Hz	882	273.42Hz	961	682.72Hz
725	44.367Hz	804	110.78Hz	883	276.61Hz	962	690.67Hz
726	44.884Hz	805	112.07Hz	884	279.83Hz	963	698.72Hz
727	45.407Hz	806	113.38Hz	885	283.09Hz	964	706.86Hz
728	45.936Hz	807	114.70Hz	886	286.39Hz	965	715.09Hz
729	46.471Hz	808	116.03Hz	887	289.73Hz	966	723.43Hz
730	47.012Hz	809	117.39Hz	888	293.10Hz	967	731.85Hz
731	47.560Hz	810	118.75Hz	889	296.52Hz	968	740.38Hz
732	48.114Hz	811	120.14Hz	890	299.97Hz	969	749.01Hz
733	48.675Hz	812	121.54Hz	891	303.47Hz	970	757.73Hz
734	49.242Hz	813	122.95Hz	892	307.00Hz	971	766.56Hz
735	49.816Hz	814	124.39Hz	893	310.58Hz	972	775.49Hz
736	50.396Hz	815	125.83Hz	894	314.20Hz	973	784.52Hz
737	50.983Hz	816	127.30Hz	895	317.86Hz	974	793.66Hz
738	51.577Hz	817	128.78Hz	896	321.56Hz	975	802.91Hz
739	52.178Hz	818	130.28Hz	897	325.31Hz	976	812.27Hz
740	52.786Hz	819	131.80Hz	898	329.10Hz	977	821.73Hz
741	53.401Hz	820	133.34Hz	899	332.93Hz	978	831.30Hz
742	54.023Hz	821	134.89Hz	900	336.81Hz	979	840.99Hz
743	54.652Hz	822	136.46Hz	901	340.73Hz	980	850.78Hz
744	55.289Hz	823	138.05Hz	902	344.70Hz	981	860.70Hz
745	55.933Hz	824	139.66Hz	903	348.72Hz	982	870.72Hz
746	56.585Hz	825	141.29Hz	904	352.78Hz	983	880.87Hz
747	57.244Hz	826	142.93Hz	905	356.89Hz	984	891.13Hz
748	57.911Hz	827	144.60Hz	906	361.05Hz	985	901.51Hz
749	58.586Hz	828	146.28Hz	907	365.26Hz	986	912.02Hz
750	59.268Hz	829	147.99Hz	908	369.51Hz	987	922.64Hz
751	59.959Hz	830	149.71Hz	909	373.82Hz	988	933.39Hz
752	60.657Hz	831	151.46Hz	910	378.17Hz	989	944.26Hz
753	61.364Hz	832	153.22Hz	911	382.58Hz	990	955.27Hz
754	62.079Hz	833	155.01Hz	912	387.04Hz	991	966.39Hz
755	62.802Hz	834	156.81Hz	913	391.54Hz	992	977.65Hz
756	63.534Hz	835	158.64Hz	914	396.11Hz	993	989.04Hz
757	64.274Hz	836	160.49Hz	915	400.72Hz	994	1000.6Hz
758	65.023Hz	837	162.36Hz	916	405.39Hz	995	1012.2Hz
759	65.780Hz	838	164.25Hz	917	410.11Hz	996	1024.0Hz
760	66.547Hz	839	166.16Hz	918	414.89Hz	997	1035.9Hz
761	67.322Hz	840	168.10Hz	919	419.72Hz	998	1048.0Hz
762	68.106Hz	841	170.06Hz	920	424.61Hz	999	1060.2Hz
763	68.900Hz	842	172.04Hz	921	429.56Hz	1000	1072.6Hz
764	69.702Hz	843	174.04Hz	922	434.57Hz	1001	1085.1Hz
765	70.514Hz	844	176.07Hz	923	439.63Hz	1002	1097.7Hz
766	71.336Hz	845	178.12Hz	924	444.75Hz	1003	1110.5Hz
767	72.167Hz	846	180.19Hz	925	449.93Hz	1004	1123.4Hz
768	73.008Hz	847	182.29Hz	926	455.17Hz	1005	1136.5Hz
769	73.858Hz	848	184.42Hz	927	460.48Hz	1006	1149.8Hz
770	74.719Hz	849	186.57Hz	928	465.84Hz	1007	1163.2Hz
771	75.589Hz	850	188.74Hz	929	471.27Hz	1008	1176.7Hz
772	76.470Hz	851	190.94Hz	930	476.76Hz	1009	1190.4Hz
773	77.361Hz	852	193.16Hz	931	482.31Hz	1010	1204.3Hz
774	78.262Hz	853	195.41Hz	932	487.93Hz	1011	1218.3Hz
775	79.174Hz	854	197.69Hz	933	493.62Hz	1012	1232.5Hz
776	80.096Hz	855	199.99Hz	934	499.37Hz	1013	1246.9Hz
777	81.029Hz	856	202.32Hz	935	505.18Hz	1014	1261.4Hz
778	81.973Hz	857	204.68Hz	936	511.07Hz	1015	1276.1Hz
779	82.929Hz	858	207.07Hz	937	517.02Hz	1016	1291.0Hz
780	83.895Hz	859	209.48Hz	938	523.05Hz	1017	1306.0Hz
781	84.872Hz	860	211.92Hz	939	529.14Hz	1018	1321.2Hz
782	85.861Hz	861	214.39Hz	940	535.31Hz	1019	1336.6Hz
783	86.861Hz	862	216.88Hz	941	541.54Hz	1020	1352.2Hz
784	87.873Hz	863	219.41Hz	942	547.85Hz	1021	1367.9Hz
785	88.897Hz	864	221.97Hz	943	554.23Hz	1022	1383.9Hz
786	89.933Hz	865	224.55Hz	944	560.69Hz	1023	1400.0Hz
787	90.980Hz	866	227.17Hz	945	567.22Hz		
788	92.040Hz	867	229.82Hz	946	573.83Hz		
789	93.113Hz	868	232.49Hz	947	580.52Hz		

**Table #63**  
**Wave Folder Seq Speed**

Data	Value
0	0.5x
1	0.66x
2	0.75x
3	1.0x
4	1.33x
5	1.5x
6	2.0x
7	2.66x
8	3.0x
9	4.0x
10	5.0x
11	6.0x
12	7.0x
13	8.0x
14	9.0x
15	10.0x

**Table #64**  
**Wave Folder Seq Pattern**

Data	Value
0	A
1	B
2	C
3	D
4	E
5	F
6	G
7	H
8	I
9	J

# Effect Preset List

## Single Effect Preset

Category	Preset No.	Preset Name	Effect Type	Slider Parameter 1	Slider Parameter 2	Slider Parameter 3
FILTER	1	LPF - NO RESONANCE	CONTROL FILTER	Cutoff	Resonance	Output Level
	2	LPF - LOW RESONANCE	CONTROL FILTER	Cutoff	Resonance	Output Level
	3	LPF - MID RESONANCE	CONTROL FILTER	Cutoff	Resonance	Output Level
	4	LPF - HIGH RESONANCE	CONTROL FILTER	Cutoff	Resonance	Output Level
	5	HPF - NO RESONANCE	CONTROL FILTER	Cutoff	Resonance	Output Level
	6	HPF - LOW RESONANCE	CONTROL FILTER	Cutoff	Resonance	Output Level
	7	HPF - MID RESONANCE	CONTROL FILTER	Cutoff	Resonance	Output Level
	8	HPF - HIGH RESONANCE	CONTROL FILTER	Cutoff	Resonance	Output Level
REVERB	1	SMALL ROOM 1	SPX ROOM	Dry/Wet	Reverb Time	LPF Cutoff Frequency
	2	SMALL ROOM 2	SPX ROOM	Dry/Wet	Reverb Time	LPF Cutoff Frequency
	3	MID ROOM	SPX ROOM	Dry/Wet	Reverb Time	LPF Cutoff Frequency
	4	SMALL HALL	SPX HALL	Dry/Wet	Reverb Time	LPF Cutoff Frequency
	5	MID HALL	SPX HALL	Dry/Wet	Reverb Time	LPF Cutoff Frequency
	6	STAGE	SPX STAGE	Dry/Wet	Reverb Time	LPF Cutoff Frequency
	7	GATED REVERB	GATED REVERB	Dry/Wet	Room Size	LPF Cutoff Frequency
	8	REVERSE REVERB	REVERSE REVERB	Dry/Wet	Room Size	LPF Cutoff Frequency
DELAY	1	TEMPO DELAY 4th	TEMPO DELAY STEREO	Dry/Wet	Delay Time	Feedback
	2	PING PONG DELAY 4th	TEMPO CROSS DELAY	Dry/Wet	Delay Time L>R & Delay Time R>L	Feedback
	3	TEMPO DELAY 8th DOT	TEMPO DELAY STEREO	Dry/Wet	Delay Time	Feedback
	4	TEMPO DELAY 8th	TEMPO DELAY STEREO	Dry/Wet	Delay Time	Feedback
	5	PING PONG DELAY 8th	TEMPO CROSS DELAY	Dry/Wet	Delay Time L>R & Delay Time R>L	Feedback
	6	TEMPO DELAY 16th	TEMPO DELAY STEREO	Dry/Wet	Delay Time	Feedback
	7	ANALOG DELAY MODERN	ANALOG DELAY MODERN	Dry/Wet	Delay Time	Feedback
	8	ANALOG DELAY RETRO	ANALOG DELAY RETRO	Dry/Wet	Delay Time	Feedback
COMPRESSOR	1	COMP - SETTING 1	UNI COMP DOWN	Ratio	Threshold	Make Up Gain
	2	COMP - SETTING 2	UNI COMP DOWN	Ratio	Threshold	Make Up Gain
	3	COMP - SETTING 3	UNI COMP DOWN	Ratio	Threshold	Make Up Gain
	4	COMP - SETTING 4	UNI COMP DOWN	Ratio	Threshold	Make Up Gain
	5	COMP - SETTING 5	UNI COMP DOWN	Ratio	Threshold	Make Up Gain
	6	COMP - SETTING 6	UNI COMP DOWN	Ratio	Threshold	Make Up Gain
	7	COMP - SETTING 7	UNI COMP DOWN	Ratio	Threshold	Make Up Gain
	8	COMP - SETTING 8	UNI COMP DOWN	Ratio	Threshold	Make Up Gain
DISTORTION	1	WAVE FOLDER - SATURATION	WAVE FOLDER	Dry/Wet	Fold	Input Level
	2	AMP SIMULATOR 2 - SETTING 1	AMP SIMULATOR 2	Dry/Wet	Overdrive	LPF Cutoff Frequency
	3	AMP SIMULATOR 2 - SETTING 2	AMP SIMULATOR 2	Dry/Wet	Overdrive	LPF Cutoff Frequency
	4	JAZZ COMBO	JAZZ COMBO	Distortion	Depth	Treble
	5	AMP SIMULATOR 1	AMP SIMULATOR 1	Dry/Wet	Overdrive	Presence
	6	SMALL STEREO	SMALL STEREO	Dist Drive	Dist Tone	Dist Presence
	7	BIT CRUSHER	BIT CRUSHER	Sample Rate	Bit	Dry/Wet
	8	DIGITAL TURNTABLE	DIGITAL TURNTABLE	Noise Level	Click Level	Dry Send to Noise
MODULATION	1	SPX CHORUS	SPX CHORUS	Dry/Wet	LFO Speed	LFO Depth
	2	TEMPO FLANGER	TEMPO FLANGER	Dry/Wet	LFO Speed	LFO Depth
	3	TEMPO PHASER	TEMPO PHASER	LFO Depth	LFO Speed	Feedback Level
	4	ENSEMBLE DETUNE	ENSEMBLE DETUNE	Dry/Wet	Detune	Spread
	5	AUTO PAN	AUTO PAN	L/R Depth	LFO Speed	LFO Wave
	6	TREMOLO	TREMOLO	AM Depth	LFO Speed	PM Depth
	7	VCM AUTO WAH	VCM AUTO WAH	Speed	Resonance Offset	Output
	8	RING MODULATOR	RING MODULATOR	Dry/Wet	Osc Freq	LFO Depth

## Effect Preset List

Category	Preset No.	Preset Name	Effect Type	Slider Parameter 1	Slider Parameter 2	Slider Parameter 3
DUCKER	1	DUCKER - SETTING 1	UNI COMP DOWN	Side Chain Level	Attack	Release
	2	DUCKER - SETTING 2	UNI COMP DOWN	Side Chain Level	Attack	Release
	3	DUCKER - SETTING 3	UNI COMP DOWN	Side Chain Level	Attack	Release
	4	DUCKER - SETTING 4	UNI COMP DOWN	Side Chain Level	Attack	Release
	5	DUCKER - SETTING 5	UNI COMP DOWN	Side Chain Level	Attack	Release
	6	DUCKER - SETTING 6	UNI COMP DOWN	Side Chain Level	Attack	Release
	7	DUCKER - SETTING 7	UNI COMP DOWN	Side Chain Level	Attack	Release
	8	DUCKER - SETTING 8	UNI COMP DOWN	Side Chain Level	Attack	Release
OTHER	1	BEAT REPEAT	BEAT REPEAT	Repeat & Length	Gate Time	Freeze
	2	TALKING MODULATOR	TALKING MODULATOR	Vowel	Move Speed	Drive
	3	ROTARY SPEAKER 1 - SLOW	ROTARY SPEAKER 1	Speed Control	Rotor/Horn Balance	Mic L-R Angle
	4	ROTARY SPEAKER 2 - FAST	ROTARY SPEAKER 2	Speed Control	Rotor/Horn Balance	Modulation Depth
	5	HARMONIC ENHANCER	HARMONIC ENHANCER	Mix Level	Drive	HPF Cutoff Frequency
	6	AUTO SYNTH	AUTO SYNTH	Mod Depth	AM Depth	Delay Level
	7	SLICE	SLICE	Dry/Wet	Gate Time	Divide Type
	8	VINYL BREAK	VINYL BREAK	Break	Speed	Speed Adjust

### Send Effect Preset

Category	Preset No.	Preset Name	Effect Type	Slider Parameter 1	Slider Parameter 2	Slider Parameter 3
REVERB	1	HD ROOM	HD ROOM	Reverb Time	Room Size	Hi Damp Freq
	2	R3 ROOM	R3 ROOM	Reverb Time	Diffusion	LPF Cutoff Frequency
	3	R3 HALL	R3 HALL	Reverb Time	Diffusion	LPF Cutoff Frequency
	4	HD HALL	HD HALL	Reverb Time	Room Size	Hi Damp Freq
	5	R3 PLATE	R3 PLATE	Reverb Time	Diffusion	LPF Cutoff Frequency
	6	HD PLATE	HD PLATE	Reverb Time	Plate Type	Hi Damp Freq
	7	SPX STAGE	SPX STAGE	Reverb Time	Diffusion	LPF Cutoff Frequency
	8	REV-X HALL	REV-X HALL	Reverb Time	Room Size	LPF Cutoff Frequency
DELAY	1	TEMPO DELAY 4th	TEMPO DELAY STEREO	Delay Time	Feedback	Feedback High Damp
	2	PING PONG DELAY 4th	TEMPO CROSS DELAY	Delay Time L>R & Delay Time R>L	Feedback	Feedback High Damp
	3	TEMPO DELAY 8th DOT	TEMPO DELAY STEREO	Delay Time	Feedback	Feedback High Damp
	4	TEMPO DELAY 8th	TEMPO DELAY STEREO	Delay Time	Feedback	Feedback High Damp
	5	PING PONG DELAY 8th	TEMPO CROSS DELAY	Delay Time L>R & Delay Time R>L	Feedback	Feedback High Damp
	6	TEMPO DELAY 16th	TEMPO DELAY STEREO	Delay Time	Feedback	Feedback High Damp
	7	ANALOG DELAY MODERN	ANALOG DELAY MODERN	Delay Time	Feedback	Delay Input Level
	8	ANALOG DELAY RETRO	ANALOG DELAY RETRO	Delay Time	Feedback	Delay Input Level



Master Effect Preset

Category	Preset No.	Preset Name	Effect Type	Slider Parameter 1	Slider Parameter 2	Slider Parameter 3
FILTER	1	LPF - NO RESONANCE	CONTROL FILTER	Cutoff	Resonance	Output Level
	2	LPF - LOW RESONANCE	CONTROL FILTER	Cutoff	Resonance	Output Level
	3	LPF - MID RESONANCE	CONTROL FILTER	Cutoff	Resonance	Output Level
	4	LPF - HIGH RESONANCE	CONTROL FILTER	Cutoff	Resonance	Output Level
	5	HPF - NO RESONANCE	CONTROL FILTER	Cutoff	Resonance	Output Level
	6	HPF - LOW RESONANCE	CONTROL FILTER	Cutoff	Resonance	Output Level
	7	HPF - MID RESONANCE	CONTROL FILTER	Cutoff	Resonance	Output Level
	8	HPF - HIGH RESONANCE	CONTROL FILTER	Cutoff	Resonance	Output Level
REVERB	1	SMALL ROOM 1	SPX ROOM	Dry/Wet	Reverb Time	LPF Cutoff Frequency
	2	SMALL ROOM 2	SPX ROOM	Dry/Wet	Reverb Time	LPF Cutoff Frequency
	3	MID ROOM	SPX ROOM	Dry/Wet	Reverb Time	LPF Cutoff Frequency
	4	SMALL HALL	SPX HALL	Dry/Wet	Reverb Time	LPF Cutoff Frequency
	5	MID HALL	SPX HALL	Dry/Wet	Reverb Time	LPF Cutoff Frequency
	6	STAGE	SPX STAGE	Dry/Wet	Reverb Time	LPF Cutoff Frequency
	7	GATED REVERB	GATED REVERB	Dry/Wet	Room Size	LPF Cutoff Frequency
	8	REVERSE REVERB	REVERSE REVERB	Dry/Wet	Room Size	LPF Cutoff Frequency
DELAY	1	TEMPO DELAY 4th	TEMPO DELAY STEREO	Dry/Wet	Delay Time	Feedback
	2	PING PONG DELAY 4th	TEMPO CROSS DELAY	Dry/Wet	Delay Time L>R & Delay Time R>L	Feedback
	3	TEMPO DELAY 8th DOT	TEMPO DELAY STEREO	Dry/Wet	Delay Time	Feedback
	4	TEMPO DELAY 8th	TEMPO DELAY STEREO	Dry/Wet	Delay Time	Feedback
	5	PING PONG DELAY 8th	TEMPO CROSS DELAY	Dry/Wet	Delay Time L>R & Delay Time R>L	Feedback
	6	TEMPO DELAY 16th	TEMPO DELAY STEREO	Dry/Wet	Delay Time	Feedback
	7	ANALOG DELAY MODERN	ANALOG DELAY MODERN	Dry/Wet	Delay Time	Feedback
	8	ANALOG DELAY RETRO	ANALOG DELAY RETRO	Dry/Wet	Delay Time	Feedback
COMPRESSOR	1	COMP - SETTING 1	UNI COMP DOWN	Ratio	Threshold	Make Up Gain
	2	COMP - SETTING 2	UNI COMP DOWN	Ratio	Threshold	Make Up Gain
	3	COMP - SETTING 3	UNI COMP DOWN	Ratio	Threshold	Make Up Gain
	4	COMP - SETTING 4	UNI COMP DOWN	Ratio	Threshold	Make Up Gain
	5	COMP - SETTING 5	UNI COMP DOWN	Ratio	Threshold	Make Up Gain
	6	COMP - SETTING 6	UNI COMP DOWN	Ratio	Threshold	Make Up Gain
	7	COMP - SETTING 7	UNI COMP DOWN	Ratio	Threshold	Make Up Gain
	8	COMP - SETTING 8	UNI COMP DOWN	Ratio	Threshold	Make Up Gain
DISTORTION	1	WAVE FOLDER - SATURATION	WAVE FOLDER	Dry/Wet	Fold	Input Level
	2	COMP DISTORTION	COMP DISTORTION	Dry/Wet	Overdrive	LPF Cutoff Frequency
	3	WAVE FOLDER	WAVE FOLDER	Dry/Wet	Fold	Input Level
	4	AMP SIMULATOR 2 - SETTING 1	AMP SIMULATOR 2	Dry/Wet	Overdrive	LPF Cutoff Frequency
	5	AMP SIMULATOR 1	AMP SIMULATOR 1	Dry/Wet	Overdrive	Presence
	6	AMP SIMULATOR 2 - SETTING 2	AMP SIMULATOR 2	Dry/Wet	Overdrive	LPF Cutoff Frequency
	7	BIT CRUSHER	BIT CRUSHER	Sample Rate	Bit	Dry/Wet
	8	DIGITAL TURNTABLE	DIGITAL TURNTABLE	Noise Level	Click Level	Dry Send to Noise
MODULATION	1	SPX CHORUS	SPX CHORUS	Dry/Wet	LFO Speed	LFO Depth
	2	TEMPO FLANGER	TEMPO FLANGER	Dry/Wet	LFO Speed	LFO Depth
	3	TEMPO PHASER	TEMPO PHASER	LFO Depth	LFO Speed	Feedback Level
	4	ENSEMBLE DETUNE	ENSEMBLE DETUNE	Dry/Wet	Detune	Spread
	5	AUTO PAN	AUTO PAN	L/R Depth	LFO Speed	LFO Wave
	6	TREMOLO	TREMOLO	AM Depth	LFO Speed	PM Depth
	7	VCM AUTO WAH	VCM AUTO WAH	Speed	Resonance Offset	Output
	8	RING MODULATOR	RING MODULATOR	Dry/Wet	Osc Freq	LFO Depth

## Effect Preset List

Category	Preset No.	Preset Name	Effect Type	Slider Parameter 1	Slider Parameter 2	Slider Parameter 3
DUCKER	1	DUCKER - SETTING 1	UNI COMP DOWN	Side Chain Level	Attack	Release
	2	DUCKER - SETTING 2	UNI COMP DOWN	Side Chain Level	Attack	Release
	3	DUCKER - SETTING 3	UNI COMP DOWN	Side Chain Level	Attack	Release
	4	DUCKER - SETTING 4	UNI COMP DOWN	Side Chain Level	Attack	Release
	5	DUCKER - SETTING 5	UNI COMP DOWN	Side Chain Level	Attack	Release
	6	DUCKER - SETTING 6	UNI COMP DOWN	Side Chain Level	Attack	Release
	7	DUCKER - SETTING 7	UNI COMP DOWN	Side Chain Level	Attack	Release
	8	DUCKER - SETTING 8	UNI COMP DOWN	Side Chain Level	Attack	Release
OTHER	1	BEAT REPEAT	BEAT REPEAT	Repeat & Length	Gate Time	Play Speed
	2	TALKING MODULATOR	TALKING MODULATOR	Vowel	Move Speed	Drive
	3	ROTARY SPEAKER 1 - SLOW	ROTARY SPEAKER 1	Speed Control	Rotor/Horn Balance	Mic L-R Angle
	4	ROTARY SPEAKER 2 - FAST	ROTARY SPEAKER 2	Speed Control	Rotor/Horn Balance	Modulation Depth
	5	HARMONIC ENHANCER	HARMONIC ENHANCER	Mix Level	Drive	HPF Cutoff Frequency
	6	AUTO SYNTH	AUTO SYNTH	Mod Depth	AM Depth	Delay Level
	7	SLICE	SLICE	Dry/Wet	Gate Time	Divide Type
	8	VINYL BREAK	VINYL BREAK	Break	Speed	Speed Adjust

# Sound Design Parameter List

## Drum Sound Design

Page	Adjustment Item	Index Display	Parameter Scope	Detailed Parameter Name	Parameter Lock / Motion Recording	Note
1	Sound Select	SOUND	-	Bank Select, Program Change		
	Pitch	PITCH	Sound	Note Shift	✓	
	Pan	PAN	Track	Track Pan	✓	
	Volume (Velocity*)	VOLUME	Track (Note*)	Track Volume (Note Velocity*)	✓	*Parameter Lock / Motion Recording
2	AEG Attack	ATTACK	Sound	AEG Attack Time	✓	
	AEG Decay	DECAY	Sound	AEG Decay Time	✓	
	LP-HP Filter Cutoff	FILTER	Sound	LPF/HPF Cutoff Frequency	✓	
	LP-HP Filter Resonance	RESONANCE	Sound	LPF/HPF Resonance	✓	
3	Reverb Send	REVERB	Sound	Reverb Send	✓	
	Delay Send	DELAY	Sound	Variation Send	✓	
	EQ High Gain	OTHER	Sound	2bandEQ High Gain	✓	
	EQ Low Gain	OTHER	Sound	2bandEQ Low Gain	✓	

## Synth Sound Design

Page	Adjustment Item	Index Display	Parameter Scope	Detailed Parameter Name	Parameter Lock / Motion Recording	Note
1	Sound Select	SOUND	-	Bank Select, Program Change		
	Mono/Poly/Chord	MONO/POLY or CHORD	Sound	Mono/Poly Mode, Chordset Select		
	Pan	PAN	Track	Track Pan	✓	
	Volume	VOLUME	Track	Track Volume (Note Velocity*1, Sound Volume*2)	✓	*1 Parameter Lock *2 Motion Recording
2	AEG Attack	ATTACK	Sound	AEG Attack Time	✓	
	AEG Decay/Release	DECAY	Sound	AEG Decay/Release Offset	✓	
	LP-HP Filter Cutoff	FILTER	Sound	LPF/HPF Cutoff Frequency	✓	
	LP-HP Filter Resonance	RESONANCE	Sound	LPF/HPF Resonance	✓	
3	Reverb Send	REVERB	Sound	Reverb Send	✓	
	Delay Send	DELAY	Sound	Variation Send	✓	
	EQ High Gain	OTHER	Sound	2bandEQ High Gain	✓	
	EQ Low Gain	OTHER	Sound	2bandEQ Low Gain	✓	
4	Portamento Time	OTHER	Sound	Portamento Time/Switch	✓	
	Arpeggiator Type	OTHER	Sound	Arpeggiator Preset/Switch		
	Arpeggiator Gate Time	OTHER	Sound	Arpeggiator Gate Time Rate	✓	
	Arpeggiator Speed	OTHER	Sound	Arpeggiator Unit		

**DX Sound Design**

Page	Adjustment Item	Index Display	Parameter Scope	Detailed Parameter Name	Parameter Lock / Motion Recording	Note
1	Sound Select	SOUND	-	Bank Select, Program Change		
	Mono/Poly/Chord	MONO/POLY or CHORD	Sound	Mono/Poly Mode, Chordset Select		
	Pan	PAN	Track	Track Pan	✓	
	Volume	VOLUME	Track	Track Volume (Note Velocity*1, Sound Volume*2)	✓	*1 Parameter Lock *2 Motion Recording
2	AEG Attack	ATTACK	Sound	AEG Attack Time	✓	
	AEG Decay/Release	DECAY	Sound	AEG Decay/Release Offset	✓	
	LP-HP Filter Cutoff	FILTER	Sound	LPF/HPF Cutoff Frequency	✓	
	LP-HP Filter Resonance	RESONANCE	Sound	LPF/HPF Resonance	✓	
3	Reverb Send	REVERB	Sound	Reverb Send	✓	
	Delay Send	DELAY	Sound	Variation Send	✓	
	EQ High Gain	OTHER	Sound	2bandEQ High Gain	✓	
	EQ Low Gain	OTHER	Sound	2bandEQ Low Gain	✓	
4	Portamento Time	OTHER	Sound	Portamento Time	✓	Mono only
	Arpeggiator Type	OTHER	Sound	Arpeggiator Preset/Switch		
	Arpeggiator Gate Time	OTHER	Sound	Arpeggiator Gate Time Rate	✓	
	Arpeggiator Speed	OTHER	Sound	Arpeggiator Unit		
5	FM Algorithm	OTHER	FM Operator	FM Algorithm	✓	
	Modulator Amount	OTHER	Sound	Mod Amount Offset	✓	
	Modulator Frequency	OTHER	Sound	Freq Ratio Offset	✓	
	Modulator Feedback	OTHER	Sound	Feedback Offset	✓	

**SAMPLER Sound Design**

Page	Adjustment Item	Index Display	Parameter Scope	Detailed Parameter Name	Parameter Lock / Motion Recording	Note
1	Sound Select	SOUND	-	Element Change		
	Pitch	PITCH	Element	Coarse Tune	✓	
	Pan	PAN	Element	Pan	✓	
	Volume	VOLUME	Element	Level (Note Velocity*)	✓	* Parameter Lock
2	AEG Attack	ATTACK	Element	AEG Attack Time	✓	
	AEG Decay	DECAY	Element	Release Time *1, Decay 1/2 Time *2	✓	*1 Gate, *2 Trigger
	LP-HP Filter Cutoff	FILTER	Sound	LPF/HPF Cutoff Frequency	✓	
	LP-HP Filter Resonance	RESONANCE	Sound	LPF/HPF Resonance	✓	
3	Reverb Send	REVERB	Sound	Reverb Send	✓	
	Delay Send	DELAY	Sound	Variation Send	✓	
	EQ High Gain	OTHER	Sample	EQ2 Gain	✓	
	EQ Low Gain	OTHER	Sample	EQ1 Gain	✓	
4	Start Point	OTHER	Sample	Start Point		
	End Point	OTHER	Sample	End Point		
	PEG Attack Level	OTHER	Element	PEG Attack Level	✓	
	PEG Decay Time	OTHER	Element	PEG Decay Time	✓	

# MIDI Data Format

## 1 Scope

The specifications described herein apply to transmission and reception of MIDI data by a SEQTRAK.

## 2 Compliance

The specifications described herein comply with the MIDI 1.0 standard.

### (1) TRANSMIT FLOW

MIDI OUT <--[SW1]	-----[SW2]	-----NOTE ON/OFF	9nH
		-----[SW6]-----CONTROL CHANGE	
		PORTAMENTO TIME	BnH, 05H
		CHANNEL VOLUME	BnH, 07H
		PAN	BnH, 0AH
		MODEL-SPECIFIC	BnH, (14H .. 15H)
		MODEL-SPECIFIC	BnH, (17H .. 1DH)
		SUSTAIN SWITCH	BnH, 40H
		PORTAMENTO SWITCH	BnH, 41H
		FILTER RESONANCE	BnH, 47H
		EG ATTACK TIME	BnH, 49H
		FILTER CUTOFF FREQ	BnH, 4AH
		EG DECAY/RELEASE TIME	BnH, 4BH
		REVERB SEND	BnH, 5BH
		DELAY SEND	BnH, 5EH
		MODEL-SPECIFIC	BnH, (66H .. 77H)
		-----[SW7] [SW8]--CONTROL CHANGE	
		BANK SELECT MSB	BnH, 00H
		BANK SELECT LSB	BnH, 20H
		-----[SW9] [SW10]-PROGRAM CHANGE	CnH
		-----PITCH BEND CHANGE	EnH
		-----[SW3]-----SYSTEM REALTIME MESSAGE	
		TIMING CLOCK	F8H
		-----[SW4]-----SYSTEM REALTIME MESSAGE	
		START	FAH
		STOP	FCH
		-----SYSTEM REALTIME MESSAGE	
		ACTIVE SENSING	FEH
		-----[SW5]-----SYSTEM EXCLUSIVE MESSAGE	
		BULK DUMP	F0H 43H 0nH 7FH 1CH bhH b1H 0CH ahH amH a1H ddH...ddH ccH F7H
		PARAMETER CHANGE	F0H 43H 1nH 7FH 1CH 0CH ahH amH a1H ddH...ddH F7H
		IDENTITY REPLY	F0H 7EH 7FH 06H 02H 43H 00H 41H ddH ddH mmH 00H 00H 7FH F7H
		dd : Device family number / code	
		SEQTRAK : 64H 06H	
		mm : version	
		mm = (version no. - 1.0) * 10	
		e.g.) version 1.0 mm = (1.0 - 1.0) * 10 = 0	
		version 1.5 mm = (1.5 - 1.0) * 10 = 5	

- [SW1] SYSTEM Legacy/USB/Bluetooth MIDI In/Out
- [SW2] SYSTEM Legacy/USB/Bluetooth MIDI Transmit Channel Message
- [SW3] SYSTEM MIDI Clock Out
- [SW4] SYSTEM Transmit Sequencer Control
- [SW5] SYSTEM Legacy/USB/Bluetooth MIDI Transmit System Exclusive Message
- [SW6] SYSTEM Legacy/USB/Bluetooth MIDI Transmit Control Change
- [SW7] SYSTEM Legacy/USB/Bluetooth MIDI Transmit Bank Select
- [SW8] SYSTEM Receive/Transmit Bank Select
- [SW9] SYSTEM Legacy/USB/Bluetooth MIDI Transmit Program Change
- [SW10] SYSTEM Receive/Transmit Program Change

The following System Exclusive messages are not affected by [SW1][SW5].  
 SYSTEM Legacy/USB MIDI In/Out  
 SYSTEM Sink Current Setting

(2) RECEIVE FLOW

MIDI IN >-----[SW1]	-----NOTE OFF	8nH
	-----NOTE ON/OFF	9nH
	-----CONTROL CHANGE	
	PORTAMENTO TIME	BnH, 05H
	DATA ENTRY MSB	BnH, 06H
	DATA ENTRY LSB	BnH, 26H
	CHANNEL VOLUME	BnH, 07H
	PAN	BnH, 0AH
	EXPRESSION	BnH, 0BH
	MODEL-SPECIFIC	BnH, (14H .. 15H)
	MODEL-SPECIFIC	BnH, (17H .. 1DH)
	SUSTAIN SWITCH	BnH, 40H
	PORTAMENTO SWITCH	BnH, 41H
	SOSTENUTO	BnH, 42H
	FILTER RESONANCE	BnH, 47H
	EG ATTACK TIME	BnH, 49H
	FILTER CUTOFF FREQ	BnH, 4AH
	EG DECAY/RELEASE TIME	BnH, 4BH
	REVERB SEND	BnH, 5BH
	DELAY SEND	BnH, 5EH
	DATA ENTRY INC	BnH, 60H
	DATA ENTRY DEC	BnH, 61H
	MODEL-SPECIFIC	BnH, (66H .. 77H)
	RPN	
	PITCH BEND SENS.	BnH, 64H, 00H, 65H, 00H, 06H, mmH
	FINE TUNING	BnH, 64H, 01H, 65H, 00H, 06H, mmH, 26H, 11H
	COARSE TUNING	BnH, 64H, 02H, 65H, 00H, 06H, mmH
	RPN RESET	BnH, 64H, 7FH, 65H, 7FH
	-----[SW2]---CONTROL CHANGE	
	BANK SELECT MSB	BnH, 00H
	BANK SELECT LSB	BnH, 20H
	-----CHANNEL MODE MESSAGE	
	ALL SOUND OFF	BnH, 78H
	RESET ALL CONTROLLERS	BnH, 79H
	ALL NOTE OFF	BnH, (7BH .. 7DH)
	MONO MODE ON	BnH, 7EH
	POLY MODE ON	BnH, 7FH
	-----[SW3]---PROGRAM CHANGE	CnH
	-----PITCH BEND CHANGE	EnH
	-----[SW4]---SYSTEM REALTIME MESSAGE	
	TIMING CLOCK	F8H
	-----SYSTEM REALTIME MESSAGE	
	START	FAH
	CONTINUE	FBH
	STOP	FCH
	ACTIVE SENSING	FEH
	-----SYSTEM EXCLUSIVE MESSAGE	
	BULK DUMP	F0H 43H 0nH 7FH 1CH bhH blH 0CH ahH amH alH ddH...ddH ccH F7H
	PARAMETER CHANGE	F0H 43H 1nH 7FH 1CH 0CH ahH amH alH ddH...ddH F7H
	DUMP REQUEST	F0H 43H 2nH 7FH 1CH 0CH ahH amH alH F7H
	PARAMETER REQUEST	F0H 43H 3nH 7FH 1CH 0CH ahH amH alH F7H
	-----SYSTEM EXCLUSIVE MESSAGE	
	IDENTITY REQUEST	F0H 7EH 0nH 06H 01H F7H

[SW1] SYSTEM Legacy/USB/Bluetooth MIDI In/Out  
 [SW2] SYSTEM Receive/Transmit Bank Select  
 [SW3] SYSTEM Receive/Transmit Program Change  
 [SW4] SYSTEM MIDI Sync (Internal/Auto)  
 The following System Exclusive messages are not affected by [SW1].  
 SYSTEM Legacy/USB MIDI In/Out  
 SYSTEM Sink Current Setting

**(3) TRANSMIT/RECEIVE DATA**

**(3-1) CHANNEL VOICE MESSAGES**

**(3-1-1) NOTE OFF**

```

STATUS          1000nnnn(8nH)      n = 0 - 10 CHANNEL NUMBER
NOTE No.        0kkkkkkk          k = 0:C-2 - 127:G8
VELOCITY        0vvvvvvv          v = ignored
    
```

**(3-1-2) NOTE ON/OFF**

```

STATUS          1001nnnn(9nH)      n = 0 - 10 CHANNEL NUMBER
NOTE NUMBER     0kkkkkkk          k = 0:C-2 - 127:G8
VELOCITY        0vvvvvvv(v≠0)
NOTE ON         0vvvvvvv(v=0)      Receive only.
NOTE OFF
    
```

**(3-1-3) CONTROL CHANGE**

```

STATUS          1011nnnn(BnH)      n = 0 - 10 CHANNEL NUMBER
CONTROL NUMBER  0ccccccc
CONTROL VALUE   0vvvvvvv
    
```

TRANSMIT NUMBER	NAME	VALUE	MEMO
0	BANK SELECT MSB	0 - 127	*1
32	BANK SELECT LSB	0 - 127	*1
5	PORTAMENTO TIME	0 - 127	
7	TRACK VOLUME	0 - 127	
10	PAN	0 - 127	
20,21	MODEL-SPECIFIC		*4
25..29	MODEL-SPECIFIC		*4
65	PORTAMENTO SWITCH	0:OFF, 1:ON	
71	FILTER RESONANCE	0:-64 - 64:0 - 127:+63	
73	EG ATTACK TIME	0:-64 - 64:0 - 127:+63	
74	FILTER CUTOFF FREQ	0:-64 - 64:0 - 127:+63	
75	EG DECAY/RELEASE TIME	0:-64 - 64:0 - 127:+63	
91	REVERB SEND	0 - 127	
94	DELAY SEND	0 - 127	
102..119	MODEL-SPECIFIC		*4

RECEIVE NUMBER	NAME	VALUE	MEMO
0	BANK SELECT MSB	0 - 127	*1
32	BANK SELECT LSB	0 - 127	*1
5	PORTAMENTO TIME	0 - 127	
6	DATA ENTRY MSB	0 - 127	*5
38	DATA ENTRY LSB	0 - 127	*5
7	TRACK VOLUME	0 - 127	
10	PAN	0 - 127	
11	EXPRESSION	0 - 127	
20,21	MODEL-SPECIFIC		*4
23..29	MODEL-SPECIFIC		*4
64	SUSTAIN SWITCH	0 - 127	
65	PORTAMENTO SWITCH	0:OFF, 1:ON	
66	SOSTENUTO	0-63:OFF, 64-127:ON	
71	FILTER RESONANCE	0:-64 - 64:0 - 127:+63	
73	EG ATTACK TIME	0:-64 - 64:0 - 127:+63	
74	FILTER CUTOFF FREQ	0:-64 - 64:0 - 127:+63	
75	EG DECAY/RELEASE TIME	0:-64 - 64:0 - 127:+63	
91	REVERB SEND	0 - 127	
94	DELAY SEND	0 - 127	
96	DATA ENTRY INC	127	*5
97	DATA ENTRY DEC	127	*5
102..119	MODEL-SPECIFIC		*4

\*1 Relation between BANK SELECT and PROGRAM is as follows:

CATEGORY		MSB	LSB	PROGRAM No.
Project	User 1	64	0	0 - 7
Sound	Preset 1	63	0	0 - 127
	:	:	:	:
	Preset 32	63	31	0 - 127
	User 1	63	32	0 - 127
	:	:	:	:
Sampler Element (*2)	User 16	63	47	0 - 127
	Preset 1	62	0	0 - 127
	:	:	:	:
	Preset 4	62	3	0 - 127
	User 1	62	4	0 - 127
:	:	:	:	
User 8	62	11	0 - 127 (*3)	

\*2 Regards Channel number as Element number.

\*3 Program No. 72 and later are used as temporary areas for the sampler function.  
Project 1 Elements 1..7, Project 2 Elements 1..7, Project 3... etc.

\*4 Model-specific controllers are as follows:

NUMBER	NAME	VALUE	MEMO
20	EQ HIGH - GAIN	40:-12dB - 64:0 - 88:+12dB	
21	EQ LOW - GAIN	40:-12dB - 64:0 - 88:+12dB	
23	MUTE	0-63:OFF, 64-127:ON	Receive only
24	SOLO	0:OFF, 1:TRACK1 .. 11:TRACK11	Receive only
25	DRUM PITCH	40:-24 - 64:0 - 88:+24	for Drum
26	MONO/POLY/CHORD	0:MONO, 1:POLY, 2:CHORD"	for Synth/DX
27	ARP TEMPLATE	0 - 15 (0:OFF)	for Synth/DX
28	ARP GATE	0:0% - 127:200%	for Synth/DX
29	ARP SPEED	0:200% - 3:100% - 9:25%	for Synth/DX
102	MASTER EFFECT 1 - ASSIGNED PARAMETER 1	0 - 127	
103	MASTER EFFECT 1 - ASSIGNED PARAMETER 2	0 - 127	
104	MASTER EFFECT 1 - ASSIGNED PARAMETER 3	0 - 127	
105	MASTER EFFECT 2 - ASSIGNED PARAMETER 1	0 - 127	
106	MASTER EFFECT 3 - ASSIGNED PARAMETER 1	0 - 127	
107	SINGLE EFFECT - ASSIGNED PARAMETER 1	0 - 127	
108	SINGLE EFFECT - ASSIGNED PARAMETER 2	0 - 127	
109	SINGLE EFFECT - ASSIGNED PARAMETER 3	0 - 127	
110	SEND REVERB - ASSIGNED PARAMETER 1	0 - 127	
111	SEND REVERB - ASSIGNED PARAMETER 2	0 - 127	
112	SEND REVERB - ASSIGNED PARAMETER 3	0 - 127	
113	SEND DELAY - ASSIGNED PARAMETER 1	0 - 127	
114	SEND DELAY - ASSIGNED PARAMETER 2	0 - 127	
115	SEND DELAY - ASSIGNED PARAMETER 3	0 - 127	
116	FM ALGORITHM	0 - 11	for DX
117	FM MODULATION AMOUNT	0 - 127	for DX
118	FM MODULATOR FREQUENCY	0 - 127	for DX
119	FM MODULATOR FEEDBACK	0 - 127	for DX

\*5 Used only when a value is set using RPN.

Bank Select will be actually executed when the Program Change message is received.  
Bank Select and Program Change numbers that are not supported by this product will be ignored.

### (3-1-4) PROGRAM CHANGE

STATUS	1100nnnn (CnH)	n = 0 - 10 CHANNEL NUMBER
PROGRAM NUMBER	0ppppppp	p = 0 - 127

### (3-1-5) PITCH BEND CHANGE

STATUS	1110nnnn (EnH)	n = 0 - 10 CHANNEL NUMBER
LSB	0vvvvvvv	PITCH BEND CHANGE LSB
MSB	0vvvvvvv	PITCH BEND CHANGE MSB

## (3-2) CHANNEL MODE MESSAGES

STATUS	1011nnnn (BnH)	n = 0 - 10 CHANNEL NUMBER
CONTROL NUMBER	0ccccccc	c = CONTROL NUMBER
CONTROL VALUE	0vvvvvvvv	v = DATA VALUE

### (3-2-1) ALL SOUND OFF (CONTROL NUMBER = 78H , DATA VALUE = 0)

All the sounds currently played, including channel messages such as Note-On and Hold-On of a certain channel are muted this message is received.

### (3-2-2) RESET ALL CONTROLLERS (CONTROL NUMBER = 79H , DATA VALUE = 0)

Resets the values set for the following controllers.

PITCH BEND CHANGE	0 (center)
EXPRESSION	127 (maximum)
SUSTAIN SWITCH	0 (off)
SOSTENUTO SWITCH	0 (off)
RPN	Not assigned; No change

### (3-2-3) ALL NOTE OFF (CONTROL NUMBER = 7BH , DATA VALUE = 0)

All the notes currently set to on in certain channel(s) are muted when receiving this message. However, if Sustain or Sostenuto is on, notes will continue sounding until these are turned off.

### (3-2-4) OMNI MODE OFF (CONTROL NUMBER = 7CH , DATA VALUE = 0)

Performs the same function as when receiving ALL NOTES OFF.

### (3-2-5) OMNI MODE ON (CONTROL NUMBER = 7DH , DATA VALUE = 0)

Performs the same function as when receiving ALL NOTES OFF.

### (3-2-6) MONO (CONTROL NUMBER = 7EH , DATA VALUE = 0..10)

The Channel is set to Mode 4.

### (3-2-7) POLY (CONTROL NUMBER = 7FH , DATA VALUE = 0..10)

The Channel is set to Mode 3.



**(3-3) REGISTERED PARAMETER NUMBER**

STATUS	1011nnnn(BnH)	n = 0 - 10 CHANNEL NUMBER
LSB	01100100(64H)	
RPN LSB	0ppppppp	p = RPN LSB (Refer to the table shown below.)
MSB	01100101(65H)	
RPN MSB	0qggqqqq	q = RPN MSB (Refer to the table shown below.)
DATA ENTRY MSB	00000110(06H)	
DATA VALUE	0mmmmmmmm	m = Data Value
DATA ENTRY LSB	00100110(26H)	
DATA VALUE	01111111	l = Data Value

First, specify the parameter using RPN MSB/LSB numbers.  
Then, set its value with data entry MSB/LSB.

RPN	D.ENTRY	PARAMETER NAME	DATA RANGE
LSB MSB	MSB LSB		
00H 00H	mmH ---	PITCH BEND SENSITIVITY	00H - 18H (0 - 24 semitones)
01H 00H	mmH 11H	MASTER FINE TUNE	{mmH,11H}={00H,00H}-{40H,00H}-{7FH,7FH} (-8192*100/8192) - 0 - (+8191*100/8192)
02H 00H	mmH ---	MASTER COARSE TUNE	28H - 40H - 58H (-24 - 0 - +24 semitones)
7FH 7FH	--- ---	RPN RESET	

RPN numbers will be left not unspecified.  
The internal values are not affected.

**(3-4) SYSTEM REALTIME MESSAGES****(3-4-1) ACTIVE SENSING**

STATUS 11111110(FEH)

Transmitted at every 250 msec.

Once this code is received at a legacy MIDI interface, the instrument starts sensing.

When no status nor data is received for over approximately 500 ms,

The MIDI receiving buffer will be cleared, and any sounds currently playing are forcibly turned off.

**(3-5) SYSTEM EXCLUSIVE MESSAGES****(3-5-1) UNIVERSAL NON REALTIME MESSAGE****(3-5-1-1) IDENTITY REQUEST (Receive only)**

F0H 7EH 0nH 06H 01H F7H (n = ignored)

**(3-5-1-2) IDENTITY REPLY (Transmit only)**

F0H 7EH 7FH 06H 02H 43H 00H 41H ddH ddH mmH 00H 00H 7FH F7H  
dd : Device family number / code  
SEQTRAK : 64H 06H  
mm : version  
mm = (version no. - 1.0) \* 10  
e.g.) version 1.0 mm = (1.0 - 1.0) \* 10 = 0  
version 1.5 mm = (1.5 - 1.0) \* 10 = 5

**(3-5-2) PARAMETER CHANGE****(3-5-2-1) NATIVE PARAMETER CHANGE, MODE CHANGE**

11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1n	Device Number
01111111	7F	Group ID High
00011100	1C	Group ID Low
00001100	0C	Model ID
0aaaaaaaa	aaaaaaaa	Address High
0aaaaaaaa	aaaaaaaa	Address Mid
0aaaaaaaa	aaaaaaaa	Address Low
0ddddddd	ddddddd	Data
11110111	F7	End of Exclusive

For parameters with data size of 2 or more, the appropriate number of data bytes will be transmitted.  
See the following MIDI Data Table for Address.

**(3-5-3) BULK DUMP**

11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0000nnnn	0n	Device Number
01111111	7F	Group ID High
00011100	1C	Group ID Low
0bbbbbbb	bbbbbbb	Byte Count
0bbbbbbb	bbbbbbb	Byte Count
00001100	0C	Model ID
0aaaaaaaa	aaaaaaaa	Address High
0aaaaaaaa	aaaaaaaa	Address Mid
0aaaaaaaa	aaaaaaaa	Address Low
0	0	Data
0ccccccc	ccccccc	Check-sum
11110111	F7	End of Exclusive

See the following MIDI Data Table for Address and Byte Count.

The Check-sum is the value that results in a value of 0 for the lower 7 bits when the Byte Count, Start Address, Data and Check-sum itself are added.

(3-5-4) DUMP REQUEST

11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0010nnnn	2n	Device Number
01111111	7F	Group ID High
00011100	1C	Group ID Low
00001100	0C	Model ID
0aaaaaaa	aaaaaaa	Address High
0aaaaaaa	aaaaaaa	Address Mid
0aaaaaaa	aaaaaaa	Address Low
11110111	F7	End of Exclusive

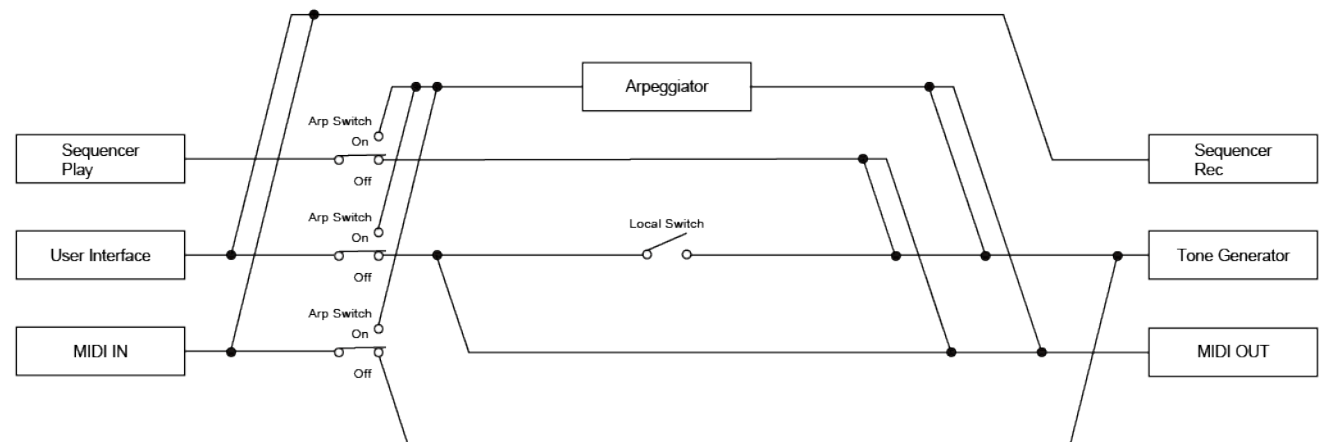
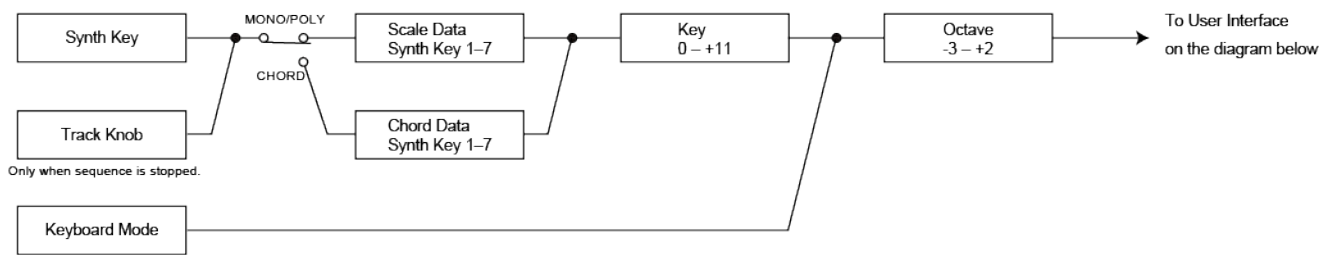
See the following MIDI Data Table for Address.

(3-5-5) PARAMETER REQUEST

11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0011nnnn	3n	Device Number
01111111	7F	Group ID High
00011100	1C	Group ID Low
00001100	0C	Model ID
0aaaaaaa	aaaaaaa	Address High
0aaaaaaa	aaaaaaa	Address Mid
0aaaaaaa	aaaaaaa	Address Low
11110111	F7	End of Exclusive

See the following MIDI Data Table for Address.

(4) SYSTEM OVERVIEW



# MIDI Data Table

## Bank Select / Program Change

MSB	(HEX)	LSB	(HEX)	Program No.	Type	Memory	Description
64	40	0	00	0 - 8	Project / Temporary Project	User 1	Channel number will be ignored. Program No = 8 is Temporary Project.
63	3F	0	00	0 - 127	Drum / Synth / DX Sound	Preset 1	
		1	01	0 - 127		Preset 2	
		2	02	0 - 127		Preset 3	
		3	03	0 - 127		Preset 4	
		4	04	0 - 127		Preset 5	
		5	05	0 - 127		Preset 6	
		6	06	0 - 127		Preset 7	
		7	07	0 - 127		Preset 8	
		8	08	0 - 127		Preset 9	
		9	09	0 - 127		Preset 10	
		10	0A	0 - 127		Preset 11	
		11	0B	0 - 127		Preset 12	
		12	0C	0 - 127		Preset 13	
		13	0D	0 - 127		Preset 14	
		14	0E	0 - 127		Preset 15	
		15	0F	0 - 127		Preset 16	
		16	10	0 - 127		Preset 17	
		17	11	0 - 127		Preset 18	
		18	12	0 - 127		Preset 19	
		19	13	0 - 127		Preset 20	
		20	14	0 - 127		Preset 21	
		21	15	0 - 127		Preset 22	
		22	16	0 - 127		Preset 23	
		23	17	0 - 127		Preset 24	
		24	18	0 - 127		Preset 25	
		25	19	0 - 127		Preset 26	
		26	1A	0 - 127		Preset 27	
		27	1B	0 - 127		Preset 28	
		28	1C	0 - 127		Preset 29	
		29	1D	0 - 127		Preset 30	
		30	1E	0 - 127		Preset 31	
		31	1F	0 - 127		Preset 32	
		32	20	0 - 127		User 1	
		33	21	0 - 127		User 2	
		34	22	0 - 127		User 3	
		35	23	0 - 127		User 4	
		36	24	0 - 127		User 5	
		37	25	0 - 127		User 6	
		38	26	0 - 127		User 7	
		39	27	0 - 127		User 8	
		40	28	0 - 127		User 9	
		41	29	0 - 127		User 10	
		42	2A	0 - 127		User 11	
		43	2B	0 - 127		User 12	
		44	2C	0 - 127		User 13	
		45	2D	0 - 127		User 14	
		46	2E	0 - 127		User 15	
47	2F	0 - 127	User 16				
62	3E	0	00	0 - 127	Sampler Element	Preset 1	Regards channel number as element number.
		1	01	0 - 127		Preset 2	
		2	02	0 - 127		Preset 3	
		3	03	0 - 127		Preset 4	
		4	04	0 - 127		User 1	
		5	05	0 - 127		User 2	
		6	06	0 - 127		User 3	
		7	07	0 - 127		User 4	
		8	08	0 - 127		User 5	
		9	09	0 - 127		User 6	
		10	0A	0 - 127		User 7	
		11	0B	0 - 127		User 8	72 - 127 : Reserved for sampler function.

## Parameter Base Address

Parameter Block	Top Address			Description
	H	M	L	
System	00	00	00	General
	00	7F	00	Soundmondo
Bulk Control	11	00	00	Header
	12	00	00	Footer
Project Common	30	40	00	General
	30	41	00	Send Reverb
	30	42	00	Send Delay
	30	43	00	Master Effect 1
	30	44	00	Master Effect 2
	30	45	00	Master Effect 3
	30	46	00	Master Effect 4
	30	47	00	Master EQ
	30	49	00	A/D Part Insertion A
	30	4A	00	A/D Part Insertion B
	30	4B	00	A/D Part General
	30	4C	00	USB Audio Input
	30	4D	00	Scale
	Project Track	30	5p	00
30		6p	00	Chord Notes of Scale 1-4 [p:Part No.(7...9)]
30		7p	00	Chord Notes of Scale 5-8 [p:Part No.(7...9)]
Sound Common	31	0p	00	Name [p:Part No.(0...10)]
	31	1p	00	General [p:Part No.(0...10)]
	31	2p	00	Insertion A [p:Part No.(0...10)]
	31	3p	00	Insertion B [p:Part No.(0...10)]
	31	4p	00	LFO [p:Part No.(0...8,10)]
	31	5p	00	Arpeggiator [p:Part No.(7...9)]
Sound Drum/Synth/SAMPLER	41	ep	00	Oscillator/Amplitude/Pitch [p:Part No.(0...8,10), e:Element No.(0...7)]
	42	ep	00	Filter/EQ/LFO [p:Part No.(0...8,10), e:Element No.(0...7)]
Sound DX	48	09	00	Common
	49	09	00	Operator [o:Operator No.(0...3)]
SAMPLER Sample	50	eA	00	General [e:Element No.(0...6)]

## Bulk Dump Block

"Top Address" indicates the top address of each block designated by bulk dump operation.

"Byte Count" indicates the data size contained in each block designated by bulk dump operation.

The Block from the Bulk Header to the Bulk Footer can be received regardless of their order. They can be received even if all of them are not transmitted. They cannot be received if the irrelevant block is included.

To execute 1 PROJECT / SOUND / SAMPLER ELEMENT bulk dump request, designate its corresponding Bulk Header address.

For the information about "mm" and "nn" shown in the following list, refer to Parameter Change Table (Bulk control) below.

Parameter Block	Description	Byte Count		Top Address		
		Dec	Hex	H	M	L
SYSTEM	General	30	001E	00	00	00
PROJECT	Bulk Header	4	0004	11	mm	nn
	Soundmondo	8	0008	00	7F	00
Project Common	General	132	0084	30	40	00
	Send Reverb	75	004B	30	41	00
	Send Delay	76	004C	30	42	00
	Master Effect 1	76	004C	30	43	00
	Master Effect 2	76	004C	30	44	00
	Master Effect 3	76	004C	30	45	00
	Master Effect 4	76	004C	30	46	00
	Master EQ	25	0019	30	47	00
	A/D Part Insertion A	28	001C	30	49	00
	A/D Part Insertion B	28	001C	30	4A	00
	A/D Part General	72	0048	30	4B	00
	USB Audio Input	72	0048	30	4C	00
	Scale	132	0084	30	4D	00
	Project Track	General [p:Part No.(0...10)]	46	002E	30	5p
Chord Notes of Scale 1-4 [p:Part No.(7...9)]		132	0084	30	6p	00
Chord Notes of Scale 5-8 [p:Part No.(7...9)]		132	0084	30	7p	00
Sound Common	Name [p:Part No.(0...10)]	110	006E	31	0p	00
	General [p:Part No.(0...10)]	84	0054	31	1p	00
	Insertion A [p:Part No.(0...10)]	72	0048	31	2p	00
	Insertion B [p:Part No.(0...10)]	72	0048	31	3p	00
	LFO [p:Part No.(0...8,10)]	43	002B	31	4p	00
	Arpeggiator [p:Part No.(7...9)]	36	0024	31	5p	00
	:				11 Parts	
Sound Drum/Synth/SAMPLER	Oscillator/Amplitude/Pitch [p:Part No.(0...8,10), e:Element No.(0...7)]	113	0071	41	ep	00
	Filter/EQ/LFO [p:Part No.(0...8,10), e:Element No.(0...7)]	75	004B	42	ep	00
	:	8 Blocks		10 Parts		
Sound DX	Common	28	001C	48	09	00
	Operator [o:Operator No.(0...3)]	36	0024	49	o9	00
	:	4 Blocks				
SAMPLER Sample	General [e:Element No.(0...6)]	116	0074	50	eA	00
	:	7 Blocks				
	Bulk Footer	4	0004	12	mm	nn
SOUND	Bulk Header	4	0004	11	mm	nn
	Soundmondo	8	0008	00	7F	00
Sound Common	Name [p:Part No.(0...10)]	110	006E	31	0p	00
	General [p:Part No.(0...10)]	84	0054	31	1p	00
	Insertion A [p:Part No.(0...10)]	72	0048	31	2p	00
	Insertion B [p:Part No.(0...10)]	72	0048	31	3p	00
	LFO [p:Part No.(0...8,10)]	43	002B	31	4p	00
	Arpeggiator [p:Part No.(7...9)]	36	0024	31	5p	00
Sound Drum/Synth/SAMPLER	Oscillator/Amplitude/Pitch [p:Part No.(0...8,10), e:Element No.(0...7)]	113	0071	41	ep	00
	Filter/EQ/LFO [p:Part No.(0...8,10), e:Element No.(0...7)]	75	004B	42	ep	00
	:	8 Blocks				
Sound DX	Common	28	001C	48	09	00
	Operator [o:Operator No.(0...3)]	36	0024	49	o9	00
	:	4 Blocks				
SAMPLER Sample	General [e:Element No.(0...6)]	116	74	50	eA	00
	:	7 Blocks				
	Bulk Footer	4	0004	12	mm	nn

Edit Buffer : Only the Part No. p same as the Part No. specified in "nn" is available.  
 User : Only the Part No. 0 is available.

## MIDI Data Table

Parameter Block	Description	Byte Count		Top Address		
		Dec	Hex	H	M	L
SAMPLER ELEMENT	Bulk Header	72	0048	11	mm	nn
Sound Drum/Synth/SAMPLER	Oscillator/Amplitude/Pitch [e:Element No.(0...6)]	113	0071	41	eA	00
	Filter/EQ/LFO [e:Element No.(0...6)]	75	004B	42	eA	00
SAMPLER Sample	General [e:Element No.(0...6)]	116	74	50	eA	00
	Bulk Footer	4	0004	12	mm	nn

Edit Buffer : Only the Element No. p same as the Element No. specified in "nn" is available.  
 User : Only the Element No. 0 is available..

Message Type	Data
Parameter Change	F0, 43, 1n, gh, gl, id, ah, am, al, dt, ... F7
Parameter Request	F0, 43, 3n, gh, gl, id, ah, am, al F7
Bulk Dump	F0, 43, 0n, gh, gl, bh, bl, id, ah, am, al, dt, ..., cc, F7
Bulk Request	F0, 43, 2n, gh, gl, id, ah, am, al, F7

n: Device Number  
 gh: Group Number High  
 gl: Group Number Low  
 bh: Byte Count High  
 bl: Byte Count Low  
 id: Model ID  
 ah: Parameter Address High  
 am: Parameter Address Middle  
 al: Parameter Address Low  
 dt: Data  
 cc: Data Checksum  
 Group Number = 7F 1C, Model ID = 0C

## Parameter Change Table

## Bulk Control

Address		size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
11	00	nn	1	-	Bulk Header	Project Edit Buffer (nn = 0)	-
	01	nn	1	-	Bulk Header	Project User 1 (nn = 0-7)	-
	02	nn	1	-	Bulk Header	Sound Edit Buffer Part nn (nn = 0-10)	-
	03	nn	1	-	Bulk Header	Sound User 1 (nn = 0-127)	-
	04	nn	1	-	Bulk Header	Sound User 2 (nn = 0-127)	-
	05	nn	1	-	Bulk Header	Sound User 3 (nn = 0-127)	-
	06	nn	1	-	Bulk Header	Sound User 4 (nn = 0-127)	-
	07	nn	1	-	Bulk Header	Sound User 5 (nn = 0-127)	-
	08	nn	1	-	Bulk Header	Sound User 6 (nn = 0-127)	-
	09	nn	1	-	Bulk Header	Sound User 7 (nn = 0-127)	-
	0A	nn	1	-	Bulk Header	Sound User 8 (nn = 0-127)	-
	0B	nn	1	-	Bulk Header	Sound User 9 (nn = 0-127)	-
	0C	nn	1	-	Bulk Header	Sound User 10 (nn = 0-127)	-
	0D	nn	1	-	Bulk Header	Sound User 11 (nn = 0-127)	-
	0E	nn	1	-	Bulk Header	Sound User 12 (nn = 0-127)	-
	0F	nn	1	-	Bulk Header	Sound User 13 (nn = 0-127)	-
	10	nn	1	-	Bulk Header	Sound User 14 (nn = 0-127)	-
	11	nn	1	-	Bulk Header	Sound User 15 (nn = 0-127)	-
	12	nn	1	-	Bulk Header	Sound User 16 (nn = 0-127)	-
	13	nn	1	-	Bulk Header	Sampler Element Edit Buffer Element nn (nn = 0-6)	-
	14	nn	1	-	Bulk Header	Sampler Element User 1 (nn = 0-127)	-
	15	nn	1	-	Bulk Header	Sampler Element User 2 (nn = 0-127)	-
	16	nn	1	-	Bulk Header	Sampler Element User 3 (nn = 0-127)	-
	17	nn	1	-	Bulk Header	Sampler Element User 4 (nn = 0-127)	-
	18	nn	1	-	Bulk Header	Sampler Element User 5 (nn = 0-127)	-
	19	nn	1	-	Bulk Header	Sampler Element User 6 (nn = 0-127)	-
	1A	nn	1	-	Bulk Header	Sampler Element User 7 (nn = 0-127)	-
	1B	nn	1	-	Bulk Header	Sampler Element User 8 (nn = 0-127)	-
12	00	nn	1	-	Bulk Footer	Project Edit Buffer (nn = 0)	-
	01	nn	1	-	Bulk Footer	Project User 1 (nn = 0-7)	-
	02	nn	1	-	Bulk Footer	Sound Edit Buffer Part nn (nn = 0-10)	-
	03	nn	1	-	Bulk Footer	Sound User 1 (nn = 0-127)	-
	04	nn	1	-	Bulk Footer	Sound User 2 (nn = 0-127)	-
	05	nn	1	-	Bulk Footer	Sound User 3 (nn = 0-127)	-
	06	nn	1	-	Bulk Footer	Sound User 4 (nn = 0-127)	-
	07	nn	1	-	Bulk Footer	Sound User 5 (nn = 0-127)	-
	08	nn	1	-	Bulk Footer	Sound User 6 (nn = 0-127)	-
	09	nn	1	-	Bulk Footer	Sound User 7 (nn = 0-127)	-
	0A	nn	1	-	Bulk Footer	Sound User 8 (nn = 0-127)	-
	0B	nn	1	-	Bulk Footer	Sound User 9 (nn = 0-127)	-
	0C	nn	1	-	Bulk Footer	Sound User 10 (nn = 0-127)	-
	0D	nn	1	-	Bulk Footer	Sound User 11 (nn = 0-127)	-
	0E	nn	1	-	Bulk Footer	Sound User 12 (nn = 0-127)	-
	0F	nn	1	-	Bulk Footer	Sound User 13 (nn = 0-127)	-
	10	nn	1	-	Bulk Footer	Sound User 14 (nn = 0-127)	-
	11	nn	1	-	Bulk Footer	Sound User 15 (nn = 0-127)	-
	12	nn	1	-	Bulk Footer	Sound User 16 (nn = 0-127)	-
	13	nn	1	-	Bulk Footer	Sampler Element Edit Buffer Element nn (nn = 0-6)	-
	14	nn	1	-	Bulk Footer	Sampler Element User 1 (nn = 0-127)	-
	15	nn	1	-	Bulk Footer	Sampler Element User 2 (nn = 0-127)	-
	16	nn	1	-	Bulk Footer	Sampler Element User 3 (nn = 0-127)	-
	17	nn	1	-	Bulk Footer	Sampler Element User 4 (nn = 0-127)	-
	18	nn	1	-	Bulk Footer	Sampler Element User 5 (nn = 0-127)	-
	19	nn	1	-	Bulk Footer	Sampler Element User 6 (nn = 0-127)	-
	1A	nn	1	-	Bulk Footer	Sampler Element User 7 (nn = 0-127)	-
	1B	nn	1	-	Bulk Footer	Sampler Element User 8 (nn = 0-127)	-

## System

## General

Address		size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes	
00	00	00	1	00 - 7F	Speaker Master Volume	0 - 127	64	
		01	1	00 - 7F	Headphone Master Volume	0 - 127	20	
		02	4	00 - 00 00 - 07 00 - 0F 00 - 0F	Master Tune	-102.4 - +102.3 1st bit3-0 → bit15-12, 2nd bit3-0 → bit11-8 3rd bit3-0 → bit7-4, 4th bit3-0 → bit3-0	00 04 00 00	MIDI Master Tuning
		06	1	00 - 01	Local Switch	Off, On	01	
		07	1	00 - 01	Receive/Transmit Bank Select	Off, On	01	
		08	1	00 - 01	Receive/Transmit Program Change	Off, On	01	
		09	1	00 - 01	Legacy MIDI In/Out	Off, On	01	
		0A	1	00 - 01	Legacy MIDI Transmit Channel Message	Off, On	01	
		0B	1	00 - 70	Legacy MIDI Transmit Control Change Transmit Bank Select Transmit Program Change	bit 6:CC Off, On bit 5:BS Off, On bit 4:PC Off, On bit 3-0:reserved	00	
		0C	1	00 - 01	Legacy MIDI Transmit System Exclusive Message	Off, On	00	
		0D	1	00 - 01	USB MIDI In/Out	Off, On	01	
		0E	1	00 - 01	USB MIDI Transmit Channel Message	Off, On	01	
		0F	1	00 - 70	USB MIDI Transmit Control Change Transmit Bank Select Transmit Program Change	bit 6:CC Off, On bit 5:BS Off, On bit 4:PC Off, On bit 3-0:reserved	00	
		10	1	00 - 01	USB MIDI Transmit System Exclusive Message	Off, On	00	
		11	1	00 - 01	Bluetooth MIDI In/Out	Off, On	00	
		12	1	00 - 01	Bluetooth MIDI Transmit Channel Message	Off, On	01	
		13	1	00 - 70	Bluetooth MIDI Transmit Control Change Transmit Bank Select Transmit Program Change	bit 6:CC Off, On bit 5:BS Off, On bit 4: PC Off, On bit 3-0:reserved	00	
		14	1	00 - 01	Bluetooth MIDI Transmit System Exclusive Message	Off, On	00	
		15	1	00 - 03	USB Audio Output Gain	00:-6dB, 01:+0dB, 02:+6dB, 03:+12dB	00	
		16	1	00 - 01	Wireless LAN	Off, On	00	
		17	1	00 - 01	USB Role	To Host, To Device	00	
		18	1	00 - 03	Analog Audio Output Gain	00:-6dB, 01:+0dB, 02:+6dB, 03:+12dB	01	
		19	1	00 - 02	Sampling Source	Resampling, Mic/Line In, USB Audio In	01	
		1A	1		reserved		00	
		1B	1	00 - 01	Sampling Count In	Off, On	01	
		1C	1	00 - 01	Auto Normalize	Off, On	01	
		1D	1		reserved		00	
		1E	1		reserved		00	
		1F	1	00 - 05	Record Quantize Value	Off, 60, 80, 120, 160, 240	03	
		20	1	01 - 7F	Pad Velocity	1 - 127	64	
		21	1	00 - 01	Sound Design Mode	Normal, Advanced	00	
		22	1		reserved		00	
		23	1		reserved		00	
		24	1		reserved		00	
		25	1	00 - 01	Click Switch	Off, On	00	
		26	1	00 - 09	Click Type	1 - 10	00	
		27	1	00 - 7F	Click Volume	0 - 127	40	
		28	1		reserved		00	
		29	1		reserved		00	
		2A	1	00 - 01	Midi Sync	Internal, MIDI(Auto)	01	
		2B	1	00 - 01	Transmit Sequencer Control	Off, On	01	
		2C	1		reserved		00	
		2D	1	00 - 01	Midi Clock Out	Off, On	01	
		2E	1	00 - 02	Sink Current Setting	Auto, Fixed 0A, Forbidden 500mA	00	
		2F	1	01 - 03	Pattern Select Sensitivity	1, 2, 3	01	

TOTAL SIZE = 48 30 (HEX)



**Project Common**

General

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
30	40	00	1	00 - 7F	Project Name 1		00	UTF8 (7-bit encoded)
		01	1	00 - 7F	Project Name 2		00	..
		02	1	00 - 7F	Project Name 3		00	..
		03	1	00 - 7F	Project Name 4		00	..
		04	1	00 - 7F	Project Name 5		00	..
		05	1	00 - 7F	Project Name 6		00	..
		06	1	00 - 7F	Project Name 7		00	..
		07	1	00 - 7F	Project Name 8		00	..
		08	1	00 - 7F	Project Name 9		00	..
		09	1	00 - 7F	Project Name 10		00	..
		0A	1	00 - 7F	Project Name 11		00	..
		0B	1	00 - 7F	Project Name 12		00	..
		0C	1	00 - 7F	Project Name 13		00	..
		0D	1	00 - 7F	Project Name 14		00	..
		0E	1	00 - 7F	Project Name 15		00	..
		0F	1	00 - 7F	Project Name 16		00	..
		10	1	00 - 7F	Project Name 17		00	..
		11	1	00 - 7F	Project Name 18		00	..
		12	1	00 - 7F	Project Name 19		00	..
		13	1	00 - 7F	Project Name 20		00	..
		14	1	00 - 7F	Project Name 21		00	..
		15	1	00 - 7F	Project Name 22		00	..
		16	1	00 - 7F	Project Name 23		00	..
		17	1	00 - 7F	Project Name 24		00	..
		18	1	00 - 7F	Project Name 25		00	..
		19	1	00 - 7F	Project Name 26		00	..
		1A	1	00 - 7F	Project Name 27		00	..
		1B	1	00 - 7F	Project Name 28		00	..
		1C	1	00 - 7F	Project Name 29		00	..
		1D	1	00 - 7F	Project Name 30		00	..
		1E	1	00 - 7F	Project Name 31		00	..
		1F	1	00 - 7F	Project Name 32		00	..
		20	1	00 - 7F	Project Name 33		00	..
		21	1	00 - 7F	Project Name 34		00	..
		22	1	00 - 7F	Project Name 35		00	..
		23	1	00 - 7F	Project Name 36		00	..
		24	1	00 - 7F	Project Name 37		00	..
		25	1	00 - 7F	Project Name 38		00	..
		26	1	00 - 7F	Project Name 39		00	..
		27	1	00 - 7F	Project Name 40		00	..
		28	1	00 - 7F	Project Name 41		00	..
		29	1	00 - 7F	Project Name 42		00	..
		2A	1	00 - 7F	Project Name 43		00	..
		2B	1	00 - 7F	Project Name 44		00	..
		2C	1	00 - 7F	Project Name 45		00	..
		2D	1	00 - 7F	Project Name 46		00	..
		2E	1	00 - 7F	Project Name 47		00	..
		2F	1	00 - 7F	Project Name 48		00	..
		30	1	00 - 7F	Project Name 49		00	..
		31	1	00 - 7F	Project Name 50		00	..
		32	1	00 - 7F	Project Name 51		00	..
		33	1	00 - 7F	Project Name 52		00	..
		34	1	00 - 7F	Project Name 53		00	..
		35	1	00 - 7F	Project Name 54		00	..
		36	1	00 - 7F	Project Name 55		00	..
		37	1	00 - 7F	Project Name 56		00	..
		38	1	00 - 7F	Project Name 57		00	..
		39	1	00 - 7F	Project Name 58		00	..
		3A	1	00 - 7F	Project Name 59		00	..
		3B	1	00 - 7F	Project Name 60		00	..
		3C	1	00 - 7F	Project Name 61		00	..
		3D	1	00 - 7F	Project Name 62		00	..
		3E	1	00 - 7F	Project Name 63		00	..
		3F	1	00 - 7F	Project Name 64		00	..
		40	1	00 - 7F	Project Name 65		00	..
		41	1	00 - 7F	Project Name 66		00	..

# MIDI Data Table

Address	size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
42	1	00 - 7F	Project Name 67		00	UTF8 (7-bit encoded)
43	1	00 - 7F	Project Name 68		00	..
44	1	00 - 7F	Project Name 69		00	..
45	1	00 - 7F	Project Name 70		00	..
46	1	00 - 7F	Project Name 71		00	..
47	1	00 - 7F	Project Name 72		00	..
48	1	00 - 7F	Project Name 73		00	..
49	1	00 - 7F	Project Name 74		00	..
4A	1	00 - 7F	Project Name 75		00	..
4B	1	00 - 7F	Project Name 76		00	..
4C	1	00 - 7F	Project Name 77		00	..
4D	1	00 - 7F	Project Name 78		00	..
4E	1	00 - 7F	Project Name 79		00	..
4F	1	00 - 7F	Project Name 80		00	..
50	1	00 - 7F	Project Name 81		00	..
51	1	00 - 7F	Project Name 82		00	..
52	1	00 - 7F	Project Name 83		00	..
53	1	00 - 7F	Project Name 84		00	..
54	1	00 - 7F	Project Name 85		00	..
55	1	00 - 7F	Project Name 86		00	..
56	1	00 - 7F	Project Name 87		00	..
57	1	00 - 7F	Project Name 88		00	..
58	1	00 - 7F	Project Name 89		00	..
59	1	00 - 7F	Project Name 90		00	..
5A	1	00 - 7F	Project Name 91		00	..
5B	1	00 - 7F	Project Name 92		00	..
5C	1	00 - 7F	Project Name 93		00	..
5D	1	00 - 7F	Project Name 94		00	..
5E	1	00 - 7F	Project Name 95		00	..
5F	1	00 - 7F	Project Name 96		00	..
60	1	00 - 7F	Project Name 97		00	..
61	1	00 - 7F	Project Name 98		00	..
62	1	00 - 7F	Project Name 99		00	..
63	1	00 - 7F	Project Name 100		00	..
64	1		reserved		00	
65	1	01 - 7F	Pan	L63 ... C ... R63	40	
66	1	00 - 7F	Volume	0 - 127	7F	
67	1		reserved		00	
68	1	00 - 0B	Solo Track	Off, Track 1, ..., Track 11	00	
69	1		reserved		00	
6A	1		reserved		00	
6B	1		reserved		00	
6C	1		reserved		00	
6D	1		reserved		00	
6E	1		reserved		00	
6F	1		reserved		00	
70	1		reserved		00	
71	1		reserved		00	
72	1		reserved		00	
73	1		reserved		00	
74	1		reserved		00	
75	1	05	ARP Synchro Quantize Value	240	05	
76	2	00 - 02 00 - 7F	Tempo MSB Tempo LSB	5 - 300 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	00 78	
78	1		reserved		00	
79	1	00 - 01	Pattern Select Mode	0=normal, 1=advanced	00	
7A	2	00 - 01 00 - 7F	Pattern Master Step MSB Pattern Master Step LSB	1 - 128 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	00 10	
7C	2	00 - 01 00 - 7F	Swing Offset MSB Swing Offset LSB	-58 - 0 - +58 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	01 00	
7E	1	00 - 07	Scale	Scale 1, ..., Scale 8	00	
7F	1	40 - 4B	Key	0 - +11	40	

TOTAL SIZE = 128 80 (HEX)

## Send Reverb

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
30	41	00	2	00 - 7F 00 - 7F	Reverb Type MSB Reverb Type LSB	Refer to Effect Parameter List	01 01	R3 Hall
		02	1	00 - 7F	Reverb Template Number	..	00	Basic
		03	2	00 - 7F 00 - 7F	Reverb Parameter 1 MSB Reverb Parameter 1 LSB	..	init value for Rev-X Hall / Basic	
		05	2	00 - 7F 00 - 7F	Reverb Parameter 2 MSB Reverb Parameter 2 LSB	..	init value for Rev-X Hall / Basic	
		07	2	00 - 7F 00 - 7F	Reverb Parameter 3 MSB Reverb Parameter 3 LSB	..	init value for Rev-X Hall / Basic	
		09	2	00 - 7F 00 - 7F	Reverb Parameter 4 MSB Reverb Parameter 4 LSB	..	init value for Rev-X Hall / Basic	
		0B	2	00 - 7F 00 - 7F	Reverb Parameter 5 MSB Reverb Parameter 5 LSB	..	init value for Rev-X Hall / Basic	
		0D	2	00 - 7F 00 - 7F	Reverb Parameter 6 MSB Reverb Parameter 6 LSB	..	init value for Rev-X Hall / Basic	
		0F	2	00 - 7F 00 - 7F	Reverb Parameter 7 MSB Reverb Parameter 7 LSB	..	init value for Rev-X Hall / Basic	
		11	2	00 - 7F 00 - 7F	Reverb Parameter 8 MSB Reverb Parameter 8 LSB	..	init value for Rev-X Hall / Basic	
		13	2	00 - 7F 00 - 7F	Reverb Parameter 9 MSB Reverb Parameter 9 LSB	..	init value for Rev-X Hall / Basic	
		15	2	00 - 7F 00 - 7F	Reverb Parameter 10 MSB Reverb Parameter 10 LSB	..	init value for Rev-X Hall / Basic	
		17	2	00 - 7F 00 - 7F	Reverb Parameter 11 MSB Reverb Parameter 11 LSB	..	init value for Rev-X Hall / Basic	
		19	2	00 - 7F 00 - 7F	Reverb Parameter 12 MSB Reverb Parameter 12 LSB	..	init value for Rev-X Hall / Basic	
		1B	2	00 - 7F 00 - 7F	Reverb Parameter 13 MSB Reverb Parameter 13 LSB	..	init value for Rev-X Hall / Basic	
		1D	2	00 - 7F 00 - 7F	Reverb Parameter 14 MSB Reverb Parameter 14 LSB	..	init value for Rev-X Hall / Basic	
		1F	2	00 - 7F 00 - 7F	Reverb Parameter 15 MSB Reverb Parameter 15 LSB	..	init value for Rev-X Hall / Basic	
		21	2	00 - 7F 00 - 7F	Reverb Parameter 16 MSB Reverb Parameter 16 LSB	..	init value for Rev-X Hall / Basic	
		23	2	00 - 7F 00 - 7F	Reverb Parameter 17 MSB Reverb Parameter 17 LSB	..	init value for Rev-X Hall / Basic	
		25	2	00 - 7F 00 - 7F	Reverb Parameter 18 MSB Reverb Parameter 18 LSB	..	init value for Rev-X Hall / Basic	
		27	2	00 - 7F 00 - 7F	Reverb Parameter 19 MSB Reverb Parameter 19 LSB	..	init value for Rev-X Hall / Basic	
		29	2	00 - 7F 00 - 7F	Reverb Parameter 20 MSB Reverb Parameter 20 LSB	..	init value for Rev-X Hall / Basic	
		2B	2	00 - 7F 00 - 7F	Reverb Parameter 21 MSB Reverb Parameter 21 LSB	..	init value for Rev-X Hall / Basic	
		2D	2	00 - 7F 00 - 7F	Reverb Parameter 22 MSB Reverb Parameter 22 LSB	..	init value for Rev-X Hall / Basic	
		2F	2	00 - 7F 00 - 7F	Reverb Parameter 23 MSB Reverb Parameter 23 LSB	..	init value for Rev-X Hall / Basic	
		31	2	00 - 7F 00 - 7F	Reverb Parameter 24 MSB Reverb Parameter 24 LSB	..	init value for Rev-X Hall / Basic	
		33	2		reserved			
		35	2		reserved			
		37	2		reserved			
		39	2		reserved			
		3B	2		reserved			
		3D	2		reserved			
		3F	2		reserved			
		41	2		reserved			
		43	1		reserved			
		44	1	00 - 7F	Reverb Return	0 - 127	2E	
		45	1	01 - 7F	Reverb Pan	L63 ... C ... R63	40	
		46	1	00 - 7F	Reverb On/Off	Off, On	01	

TOTAL SIZE = 71 47 (HEX)

## Send Delay

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
30	42	00	2	00, 02 00 - 7F	Variation Type MSB Variation Type LSB	Refer to Effect Parameter List	02 28	Cross Delay
		02	1	00 - 7F	Variation Template Number	..	00	
		03	2	00 - 7F 00 - 7F	Variation Parameter 1 MSB Variation Parameter 1 LSB	..	init value for Delay / Cross Delay	
		05	2	00 - 7F 00 - 7F	Variation Parameter 2 MSB Variation Parameter 2 LSB	..	init value for Delay / Cross Delay	
		07	2	00 - 7F 00 - 7F	Variation Parameter 3 MSB Variation Parameter 3 LSB	..	init value for Delay / Cross Delay	
		09	2	00 - 7F 00 - 7F	Variation Parameter 4 MSB Variation Parameter 4 LSB	..	init value for Delay / Cross Delay	
		0B	2	00 - 7F 00 - 7F	Variation Parameter 5 MSB Variation Parameter 5 LSB	..	init value for Delay / Cross Delay	
		0D	2	00 - 7F 00 - 7F	Variation Parameter 6 MSB Variation Parameter 6 LSB	..	init value for Delay / Cross Delay	
		0F	2	00 - 7F 00 - 7F	Variation Parameter 7 MSB Variation Parameter 7 LSB	..	init value for Delay / Cross Delay	
		11	2	00 - 7F 00 - 7F	Variation Parameter 8 MSB Variation Parameter 8 LSB	..	init value for Delay / Cross Delay	
		13	2	00 - 7F 00 - 7F	Variation Parameter 9 MSB Variation Parameter 9 LSB	..	init value for Delay / Cross Delay	
		15	2	00 - 7F 00 - 7F	Variation Parameter 10 MSB Variation Parameter 10 LSB	..	init value for Delay / Cross Delay	
		17	2	00 - 7F 00 - 7F	Variation Parameter 11 MSB Variation Parameter 11 LSB	..	init value for Delay / Cross Delay	
		19	2	00 - 7F 00 - 7F	Variation Parameter 12 MSB Variation Parameter 12 LSB	..	init value for Delay / Cross Delay	
		1B	2	00 - 7F 00 - 7F	Variation Parameter 13 MSB Variation Parameter 13 LSB	..	init value for Delay / Cross Delay	
		1D	2	00 - 7F 00 - 7F	Variation Parameter 14 MSB Variation Parameter 14 LSB	..	init value for Delay / Cross Delay	
		1F	2	00 - 7F 00 - 7F	Variation Parameter 15 MSB Variation Parameter 15 LSB	..	init value for Delay / Cross Delay	
		21	2	00 - 7F 00 - 7F	Variation Parameter 16 MSB Variation Parameter 16 LSB	..	init value for Delay / Cross Delay	
		23	2	00 - 7F 00 - 7F	Variation Parameter 17 MSB Variation Parameter 17 LSB	..	init value for Delay / Cross Delay	
		25	2	00 - 7F 00 - 7F	Variation Parameter 18 MSB Variation Parameter 18 LSB	..	init value for Delay / Cross Delay	
		27	2	00 - 7F 00 - 7F	Variation Parameter 19 MSB Variation Parameter 19 LSB	..	init value for Delay / Cross Delay	
		29	2	00 - 7F 00 - 7F	Variation Parameter 20 MSB Variation Parameter 20 LSB	..	init value for Delay / Cross Delay	
		2B	2	00 - 7F 00 - 7F	Variation Parameter 21 MSB Variation Parameter 21 LSB	..	init value for Delay / Cross Delay	
		2D	2	00 - 7F 00 - 7F	Variation Parameter 22 MSB Variation Parameter 22 LSB	..	init value for Delay / Cross Delay	
		2F	2	00 - 7F 00 - 7F	Variation Parameter 23 MSB Variation Parameter 23 LSB	..	init value for Delay / Cross Delay	
		31	2	00 - 7F 00 - 7F	Variation Parameter 24 MSB Variation Parameter 24 LSB	..	init value for Delay / Cross Delay	
		33	2		reserved		00 00	
		35	2		reserved		00 00	
		37	2		reserved		00 00	
		39	2		reserved		00 00	
		3B	2		reserved		00 00	
		3D	2		reserved		00 00	
		3F	2		reserved		00 00	
		41	2		reserved		00 00	
		43	1		reserved		00	
		44	1	00 - 7F	Variation Return	0 - 127	60	
		45	1	01 - 7F	Variation Pan	L63 ... C ... R63	40	
		46	1	00 - 7F	Send Variation To Reverb	0 - 127	00	
		47	1	00 - 01	Variation On/Off	Off, On	01	

TOTAL SIZE = 72

48 (HEX)

## Master Effect

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
30	4n	00	2	00 - 7F 00 - 7F	Master Effect Type MSB Master Effect Type LSB	Refer to Effect Parameter List	Refer to Effect Parameter List	
		02	1	00 - 7F	Master Effect Template Number	..	00	
		03	2	00 - 7F 00 - 7F	Master Effect Parameter 1 MSB Master Effect Parameter 1 LSB	..	Refer to Effect Parameter List	
		05	2	00 - 7F 00 - 7F	Master Effect Parameter 2 MSB Master Effect Parameter 2 LSB	..	..	
		07	2	00 - 7F 00 - 7F	Master Effect Parameter 3 MSB Master Effect Parameter 3 LSB	..	..	
		09	2	00 - 7F 00 - 7F	Master Effect Parameter 4 MSB Master Effect Parameter 4 LSB	..	..	
		0B	2	00 - 7F 00 - 7F	Master Effect Parameter 5 MSB Master Effect Parameter 5 LSB	..	..	
		0D	2	00 - 7F 00 - 7F	Master Effect Parameter 6 MSB Master Effect Parameter 6 LSB	..	..	
		0F	2	00 - 7F 00 - 7F	Master Effect Parameter 7 MSB Master Effect Parameter 7 LSB	..	..	
		11	2	00 - 7F 00 - 7F	Master Effect Parameter 8 MSB Master Effect Parameter 8 LSB	..	..	
		13	2	00 - 7F 00 - 7F	Master Effect Parameter 9 MSB Master Effect Parameter 9 LSB	..	..	
		15	2	00 - 7F 00 - 7F	Master Effect Parameter 10 MSB Master Effect Parameter 10 LSB	..	..	
		17	2	00 - 7F 00 - 7F	Master Effect Parameter 11 MSB Master Effect Parameter 11 LSB	..	..	
		19	2	00 - 7F 00 - 7F	Master Effect Parameter 12 MSB Master Effect Parameter 12 LSB	..	..	
		1B	2	00 - 7F 00 - 7F	Master Effect Parameter 13 MSB Master Effect Parameter 13 LSB	..	..	
		1D	2	00 - 7F 00 - 7F	Master Effect Parameter 14 MSB Master Effect Parameter 14 LSB	..	..	
		1F	2	00 - 7F 00 - 7F	Master Effect Parameter 15 MSB Master Effect Parameter 15 LSB	..	..	
		21	2	00 - 7F 00 - 7F	Master Effect Parameter 16 MSB Master Effect Parameter 16 LSB	..	..	
		23	2	00 - 7F 00 - 7F	Master Effect Parameter 17 MSB Master Effect Parameter 17 LSB	..	..	
		25	2	00 - 7F 00 - 7F	Master Effect Parameter 18 MSB Master Effect Parameter 18 LSB	..	..	
		27	2	00 - 7F 00 - 7F	Master Effect Parameter 19 MSB Master Effect Parameter 19 LSB	..	..	
		29	2	00 - 7F 00 - 7F	Master Effect Parameter 20 MSB Master Effect Parameter 20 LSB	..	..	
		2B	2	00 - 7F 00 - 7F	Master Effect Parameter 21 MSB Master Effect Parameter 21 LSB	..	..	
		2D	2	00 - 7F 00 - 7F	Master Effect Parameter 22 MSB Master Effect Parameter 22 LSB	..	..	
		2F	2	00 - 7F 00 - 7F	Master Effect Parameter 23 MSB Master Effect Parameter 23 LSB	..	..	
		31	2	00 - 7F 00 - 7F	Master Effect Parameter 24 MSB Master Effect Parameter 24 LSB	..	..	
		33	2		reserved		00 00	
		35	2		reserved		00 00	
		37	2		reserved		00 00	
		39	2		reserved		00 00	
		3B	2		reserved		00 00	
		3D	2		reserved		00 00	
		3F	2		reserved		00 00	
		41	2		reserved		00 00	
		43	1	00 - 0A, 10, 11, 7F	Side Chain Part	0:Part1, 1:Part2, ..., 10:Part11, 16:A/D, 17:Master, 127:Off	7F	
		44	1		reserved		00	
		45	1		reserved		00	
		46	1		reserved		00	
		47	1	00 - 01	Master Effect ON/OFF	Off, On	01	

TOTAL SIZE = 72 48 (HEX)

n = Master Effect Number

3 - 6 Master Effect 1 - 4

## Master EQ

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
30	47	00	1	34 - 4C	EQ Gain 1	-12 - +12[dB]	40	
		01	1	04 - 28	EQ Frequency 1	32 - 2000[Hz]	0C	
		02	1	01 - 78	EQ Q 1	0.1 - 12.0	07	Not available when "shelving" is selected
		03	1	00 - 01	EQ Shape 1	Shelf, Peak	00	
		04	1	34 - 4C	EQ Gain 2	-12 - +12[dB]	40	
		05	1	0E - 36	EQ Frequency 2	100 - 10.0[kHz]	14	
		06	1	01 - 78	EQ Q 2	0.1 - 12.0	07	
		07	1		reserved			
		08	1	34 - 4C	EQ Gain 3	-12 - +12[dB]	40	
		09	1	0E - 36	EQ Frequency 3	100 - 10.0[kHz]	1C	
		0A	1	01 - 78	EQ Q 3	0.1 - 12.0	07	
		0B	1		reserved			
		0C	1	34 - 4C	EQ Gain 4	-12 - +12[dB]	40	
		0D	1	0E - 36	EQ Frequency 4	100 - 10.0[kHz]	2C	
		0E	1	01 - 78	EQ Q 4	0.1 - 12.0	07	
		0F	1		reserved			
		10	1	34 - 4C	EQ Gain 5	-12 - +12[dB]	40	
		11	1	1C - 3A	EQ Frequency 5	0.5 - 16.0[kHz]	34	
		12	1	01 - 78	EQ Q 5	0.1 - 12.0	07	Not available when "shelving" is selected
		13	1	00 - 01	EQ Shape 5	Shelf, Peak	00	
		14	1	00 - 01	Master EQ On/Off	Off, On	01	

TOTAL SIZE = 21 15 (HEX)

## A/D Part Insertion A

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
30	49	00	2	00 - 7F 00 - 7F	Insertion-A Type MSB Insertion-A Type LSB	Refer to Effect Parameter List	0D 70	NOISE GATE+ COMP+EQ
		02	1	00 - 7F	Insertion-A Template Number	..	00	..
		03	2	00 - 7F 00 - 7F	Insertion-A Parameter 1 MSB Insertion-A Parameter 1 LSB	..	00 00	..
		05	2	00 - 7F 00 - 7F	Insertion-A Parameter 2 MSB Insertion-A Parameter 2 LSB	..	00 0D	..
		07	2	00 - 7F 00 - 7F	Insertion-A Parameter 3 MSB Insertion-A Parameter 3 LSB	..	00 6D	..
		09	2	00 - 7F 00 - 7F	Insertion-A Parameter 4 MSB Insertion-A Parameter 4 LSB	..	00 03	..
		0B	2	00 - 7F 00 - 7F	Insertion-A Parameter 5 MSB Insertion-A Parameter 5 LSB	..	00 4B	..
		0D	2	00 - 7F 00 - 7F	Insertion-A Parameter 6 MSB Insertion-A Parameter 6 LSB	..	00 09	..
		0F	2	00 - 7F 00 - 7F	Insertion-A Parameter 7 MSB Insertion-A Parameter 7 LSB	..	00 40	..
		11	2	00 - 7F 00 - 7F	Insertion-A Parameter 8 MSB Insertion-A Parameter 8 LSB	..	00 36	..
		13	2	00 - 7F 00 - 7F	Insertion-A Parameter 9 MSB Insertion-A Parameter 9 LSB	..	00 40	..
		15	2	00 - 7F 00 - 7F	Insertion-A Parameter 10 MSB Insertion-A Parameter 10 LSB	..	00 00	..
		17	2	00 - 7F 00 - 7F	Insertion-A Parameter 11 MSB Insertion-A Parameter 11 LSB	..	00 00	..
		19	2	00 - 7F 00 - 7F	Insertion-A Parameter 12 MSB Insertion-A Parameter 12 LSB	..	00 0D	..
		1B	2	00 - 7F 00 - 7F	Insertion-A Parameter 13 MSB Insertion-A Parameter 13 LSB	..	00 39	..
		1D	2	00 - 7F 00 - 7F	Insertion-A Parameter 14 MSB Insertion-A Parameter 14 LSB	..	00 24	..
		1F	2	00 - 7F 00 - 7F	Insertion-A Parameter 15 MSB Insertion-A Parameter 15 LSB	..	00 40	..
		21	2	00 - 7F 00 - 7F	Insertion-A Parameter 16 MSB Insertion-A Parameter 16 LSB	..	00 0A	..
		23	2	00 - 7F 00 - 7F	Insertion-A Parameter 17 MSB Insertion-A Parameter 17 LSB	..	00 00	..
		25	2	00 - 7F 00 - 7F	Insertion-A Parameter 18 MSB Insertion-A Parameter 18 LSB	..	00 00	..
		27	2	00 - 7F 00 - 7F	Insertion-A Parameter 19 MSB Insertion-A Parameter 19 LSB	..	00 00	..
		29	2	00 - 7F 00 - 7F	Insertion-A Parameter 20 MSB Insertion-A Parameter 20 LSB	..	00 00	..
		2B	2	00 - 7F 00 - 7F	Insertion-A Parameter 21 MSB Insertion-A Parameter 21 LSB	..	00 00	..
		2D	2	00 - 7F 00 - 7F	Insertion-A Parameter 22 MSB Insertion-A Parameter 22 LSB	..	00 00	..
		2F	2	00 - 7F 00 - 7F	Insertion-A Parameter 23 MSB Insertion-A Parameter 23 LSB	..	00 00	..
		31	2	00 - 7F 00 - 7F	Insertion-A Parameter 24 MSB Insertion-A Parameter 24 LSB	..	00 00	..
		33	2		reserved		00 00	
		35	2		reserved		00 00	
		37	2		reserved		00 00	
		39	2		reserved		00 00	
		3B	2		reserved		00 00	
		3D	2		reserved		00 00	
		3F	2		reserved		00 00	
		41	2		reserved		00 00	
		43	1	00 - 11, 7F	Side Chain Part	0:Part1, 1:Part2, ..., 10:Part11, 16:A/D, 17:Master, 127:Off	7F	

TOTAL SIZE = 68

44 (HEX)

## A/D Part Insertion B

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
30	4A	00	2	0D 2F	Insertion-B Type MSB Insertion-B Type LSB	Refer to Effect Parameter List	0D 2F	LP-HP FILTER
		02	1	00 - 7F	Insertion-B Template Number	..	00	..
		03	2	00 - 7F 00 - 7F	Insertion-B Parameter 1 MSB Insertion-B Parameter 1 LSB	..	02 00	..
		05	2	00 - 7F 00 - 7F	Insertion-B Parameter 2 MSB Insertion-B Parameter 2 LSB	..	00 10	..
		07	2	00 - 7F 00 - 7F	Insertion-B Parameter 3 MSB Insertion-B Parameter 3 LSB	..	00 00	..
		09	2	00 - 7F 00 - 7F	Insertion-B Parameter 4 MSB Insertion-B Parameter 4 LSB	..	00 00	..
		0B	2	00 - 7F 00 - 7F	Insertion-B Parameter 5 MSB Insertion-B Parameter 5 LSB	..	00 00	..
		0D	2	00 - 7F 00 - 7F	Insertion-B Parameter 6 MSB Insertion-B Parameter 6 LSB	..	00 00	..
		0F	2	00 - 7F 00 - 7F	Insertion-B Parameter 7 MSB Insertion-B Parameter 7 LSB	..	00 00	..
		11	2	00 - 7F 00 - 7F	Insertion-B Parameter 8 MSB Insertion-B Parameter 8 LSB	..	00 00	..
		13	2	00 - 7F 00 - 7F	Insertion-B Parameter 9 MSB Insertion-B Parameter 9 LSB	..	00 00	..
		15	2	00 - 7F 00 - 7F	Insertion-B Parameter 10 MSB Insertion-B Parameter 10 LSB	..	00 00	..
		17	2	00 - 7F 00 - 7F	Insertion-B Parameter 11 MSB Insertion-B Parameter 11 LSB	..	00 00	..
		19	2	00 - 7F 00 - 7F	Insertion-B Parameter 12 MSB Insertion-B Parameter 12 LSB	..	00 00	..
		1B	2	00 - 7F 00 - 7F	Insertion-B Parameter 13 MSB Insertion-B Parameter 13 LSB	..	00 00	..
		1D	2	00 - 7F 00 - 7F	Insertion-B Parameter 14 MSB Insertion-B Parameter 14 LSB	..	00 00	..
		1F	2	00 - 7F 00 - 7F	Insertion-B Parameter 15 MSB Insertion-B Parameter 15 LSB	..	00 00	..
		21	2	00 - 7F 00 - 7F	Insertion-B Parameter 16 MSB Insertion-B Parameter 16 LSB	..	00 00	..
		23	2	00 - 7F 00 - 7F	Insertion-B Parameter 17 MSB Insertion-B Parameter 17 LSB	..	00 00	..
		25	2	00 - 7F 00 - 7F	Insertion-B Parameter 18 MSB Insertion-B Parameter 18 LSB	..	00 00	..
		27	2	00 - 7F 00 - 7F	Insertion-B Parameter 19 MSB Insertion-B Parameter 19 LSB	..	00 00	..
		29	2	00 - 7F 00 - 7F	Insertion-B Parameter 20 MSB Insertion-B Parameter 20 LSB	..	00 00	..
		2B	2	00 - 7F 00 - 7F	Insertion-B Parameter 21 MSB Insertion-B Parameter 21 LSB	..	00 00	..
		2D	2	00 - 7F 00 - 7F	Insertion-B Parameter 22 MSB Insertion-B Parameter 22 LSB	..	00 00	..
		2F	2	00 - 7F 00 - 7F	Insertion-B Parameter 23 MSB Insertion-B Parameter 23 LSB	..	00 00	..
		31	2	00 - 7F 00 - 7F	Insertion-B Parameter 24 MSB Insertion-B Parameter 24 LSB	..	00 00	..
		33	2		reserved		00 00	
		35	2		reserved		00 00	
		37	2		reserved		00 00	
		39	2		reserved		00 00	
		3B	2		reserved		00 00	
		3D	2		reserved		00 00	
		3F	2		reserved		00 00	
		41	2		reserved		00 00	
		43	1		reserved		00	

TOTAL SIZE = 68 44 (HEX)



## A/D Part General

Address		size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes	
30	4B	00	1	00 - 03	A/D Part Input Mode	L Mono, R Mono, L+R Mono, Stereo	03	
		01	1	00 - 7F	A/D Part Volume	0 - 127	64	
		02	1	01 - 7F	A/D Part Pan	L63 ... C ... R63	40	
		03	1	00 - 7F	A/D Part Reverb Send	0 - 127	00	
		04	1	00 - 7F	A/D Part Variation Send	0 - 127	00	
		05	1	01	A/D Part Insertion Connect Type	Ins A->B	01	
		06	1	02 - 03	A/D Part Insertion FX Switch	Bit0:Insertion A Off/On, Bit1:Insertion B Off/On, Bit2-6:reserved	02	Bit1 is fixed to "On"
		07	1	00 - 7F	A/D Part Dry Level	0 - 127	7F	
		08	1		reserved			
		09	1		reserved			
		0A	1		reserved			
		0B	1	00 - 05	A/D Part 2bandEQ Low Type	Thru, LPF, HPF, Low Shelf Hi Shelf, Peak/Dip	00	
		0C	2	00 - 01 00 - 7F	A/D Part 2bandEQ Low Frequency MSB A/D Part 2bandEQ Low Frequency LSB	1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0 63.0 - 18.0k	00 30	
		0E	1	28 - 58	A/D Part 2bandEQ Low Gain	40 - 64 - 88 (-12.00 - +12.00[dB])	40	
		0F	1	01 - 78	A/D Part 2bandEQ Low Q	0.1 - 12.0	01	
		10	1	00 - 05	A/D Part 2bandEQ High Type	Thru, LPF, HPF, Low Shelf Hi Shelf, Peak/Dip	00	
		11	2	00 - 01 00 - 7F	A/D Part 2bandEQ High Frequency MSB A/D Part 2bandEQ High Frequency LSB	1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0 63.0 - 18.0k	00 30	
		13	1	28 - 58	A/D Part 2bandEQ High Gain	40 - 64 - 88 (-12.00 - +12.00[dB])	40	
		14	1	01 - 78	A/D Part 2bandEQ High Q	0.1 - 12.0	01	
		15	1	28 - 58	A/D Part 2bandEQ Output Gain	40 - 64 - 88 (-12.00 - +12.00[dB])	40	
		16	1	00 - 01, 7D	A/D Part Output Select	0:MainL&R, 1:Direct Out, 125:Off	00	
		17	1		reserved			

TOTAL SIZE = 24 18 (HEX)

## USB Audio Input

Address		size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
30	4C	00	1	00 - 03	USB Part Input Mode	L Mono, R Mono, L+R Mono, Stereo	03
		01	1	00 - 7F	USB Part Volume	0 - 127	64
		02	1	01 - 7F	USB Part Pan	L63 ... C ... R63	40
		03	1	00 - 7F	USB Part Reverb Send	0 - 127	00
		04	1	00 - 7F	USB Part Variation Send	0 - 127	00
		05	1		reserved		
		06	1		reserved		
		07	1	00 - 7F	USB Part Dry Level	0 - 127	7F
		08	1		reserved		
		09	1		reserved		
		0A	1		reserved		
		0B	1		reserved		
		0C	2		reserved		
		0E	1		reserved		
		0F	1		reserved		
		10	1		reserved		
		11	2		reserved		
		13	1		reserved		
		14	1		reserved		
		15	1		reserved		
		16	1	00 - 01, 7D	USB Part Output Select	0:MainL&R, 1:Direct Out, 125:Off	00
		17	1		reserved		

TOTAL SIZE = 24 18 (HEX)

## Scale

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
30	4D	00	1	24 - 60	Scale 1 Note of Pad 1	C1 ... C6	3C	
		01	1	24 - 60	Scale 1 Note of Pad 2	C1 ... C6	3E	
		02	1	24 - 60	Scale 1 Note of Pad 3	C1 ... C6	3F	
		03	1	24 - 60	Scale 1 Note of Pad 4	C1 ... C6	41	
		04	1	24 - 60	Scale 1 Note of Pad 5	C1 ... C6	43	
		05	1	24 - 60	Scale 1 Note of Pad 6	C1 ... C6	44	
		06	1	24 - 60	Scale 1 Note of Pad 7	C1 ... C6	46	
		07	1		reserved		00	
		08	1		reserved		00	
		09	1		reserved		00	
		0A	1		reserved		00	
		0B	1		reserved		00	
		0C	1		reserved		00	
		0D	1		reserved		00	
		0E	1		reserved		00	
		0F	1		reserved		00	
		10	1	24 - 60	Scale 2 Note of Pad 1	C1 ... C6	3C	
		11	1	24 - 60	Scale 2 Note of Pad 2	C1 ... C6	3E	
		12	1	24 - 60	Scale 2 Note of Pad 3	C1 ... C6	40	
		13	1	24 - 60	Scale 2 Note of Pad 4	C1 ... C6	41	
		14	1	24 - 60	Scale 2 Note of Pad 5	C1 ... C6	43	
		15	1	24 - 60	Scale 2 Note of Pad 6	C1 ... C6	45	
		16	1	24 - 60	Scale 2 Note of Pad 7	C1 ... C6	47	
		17	1		reserved		00	
		18	1		reserved		00	
		19	1		reserved		00	
		1A	1		reserved		00	
		1B	1		reserved		00	
		1C	1		reserved		00	
		1D	1		reserved		00	
		1E	1		reserved		00	
		1F	1		reserved		00	
		20	1	24 - 60	Scale 3 Note of Pad 1	C1 ... C6	3C	
		21	1	24 - 60	Scale 3 Note of Pad 2	C1 ... C6	3F	
		22	1	24 - 60	Scale 3 Note of Pad 3	C1 ... C6	41	
		23	1	24 - 60	Scale 3 Note of Pad 4	C1 ... C6	43	
		24	1	24 - 60	Scale 3 Note of Pad 5	C1 ... C6	46	
		25	1	24 - 60	Scale 3 Note of Pad 6	C1 ... C6	48	
		26	1	24 - 60	Scale 3 Note of Pad 7	C1 ... C6	4B	
		27	1		reserved		00	
		28	1		reserved		00	
		29	1		reserved		00	
		2A	1		reserved		00	
		2B	1		reserved		00	
		2C	1		reserved		00	
		2D	1		reserved		00	
		2E	1		reserved		00	
		2F	1		reserved		00	
		30	1	24 - 60	Scale 4 Note of Pad 1	C1 ... C6	3C	
		31	1	24 - 60	Scale 4 Note of Pad 2	C1 ... C6	3E	
		32	1	24 - 60	Scale 4 Note of Pad 3	C1 ... C6	40	
		33	1	24 - 60	Scale 4 Note of Pad 4	C1 ... C6	43	
		34	1	24 - 60	Scale 4 Note of Pad 5	C1 ... C6	45	
		35	1	24 - 60	Scale 4 Note of Pad 6	C1 ... C6	48	
		36	1	24 - 60	Scale 4 Note of Pad 7	C1 ... C6	4A	
		37	1		reserved		00	
		38	1		reserved		00	
		39	1		reserved		00	
		3A	1		reserved		00	
		3B	1		reserved		00	
		3C	1		reserved		00	
		3D	1		reserved		00	
		3E	1		reserved		00	
		3F	1		reserved		00	
		40	1	24 - 60	Scale 5 Note of Pad 1	C1 ... C6	3C	
		41	1	24 - 60	Scale 5 Note of Pad 2	C1 ... C6	3E	
		42	1	24 - 60	Scale 5 Note of Pad 3	C1 ... C6	40	
		43	1	24 - 60	Scale 5 Note of Pad 4	C1 ... C6	42	

# MIDI Data Table

Address	size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
44	1	24 - 60	Scale 5 Note of Pad 5	C1 ... C6	43	
45	1	24 - 60	Scale 5 Note of Pad 6	C1 ... C6	45	
46	1	24 - 60	Scale 5 Note of Pad 7	C1 ... C6	47	
47	1		reserved		00	
48	1		reserved		00	
49	1		reserved		00	
4A	1		reserved		00	
4B	1		reserved		00	
4C	1		reserved		00	
4D	1		reserved		00	
4E	1		reserved		00	
4F	1		reserved		00	
50	1	24 - 60	Scale 6 Note of Pad 1	C1 ... C6	3C	
51	1	24 - 60	Scale 6 Note of Pad 2	C1 ... C6	3E	
52	1	24 - 60	Scale 6 Note of Pad 3	C1 ... C6	3F	
53	1	24 - 60	Scale 6 Note of Pad 4	C1 ... C6	41	
54	1	24 - 60	Scale 6 Note of Pad 5	C1 ... C6	43	
55	1	24 - 60	Scale 6 Note of Pad 6	C1 ... C6	45	
56	1	24 - 60	Scale 6 Note of Pad 7	C1 ... C6	46	
57	1		reserved		00	
58	1		reserved		00	
59	1		reserved		00	
5A	1		reserved		00	
5B	1		reserved		00	
5C	1		reserved		00	
5D	1		reserved		00	
5E	1		reserved		00	
5F	1		reserved		00	
60	1	24 - 60	Scale 7 Note of Pad 1	C1 ... C6	3C	
61	1	24 - 60	Scale 7 Note of Pad 2	C1 ... C6	3E	
62	1	24 - 60	Scale 7 Note of Pad 3	C1 ... C6	40	
63	1	24 - 60	Scale 7 Note of Pad 4	C1 ... C6	41	
64	1	24 - 60	Scale 7 Note of Pad 5	C1 ... C6	43	
65	1	24 - 60	Scale 7 Note of Pad 6	C1 ... C6	45	
66	1	24 - 60	Scale 7 Note of Pad 7	C1 ... C6	46	
67	1		reserved		00	
68	1		reserved		00	
69	1		reserved		00	
6A	1		reserved		00	
6B	1		reserved		00	
6C	1		reserved		00	
6D	1		reserved		00	
6E	1		reserved		00	
6F	1		reserved		00	
70	1	24 - 60	Scale 8 Note of Pad 1	C1 ... C6	3C	
71	1	24 - 60	Scale 8 Note of Pad 2	C1 ... C6	3D	
72	1	24 - 60	Scale 8 Note of Pad 3	C1 ... C6	3F	
73	1	24 - 60	Scale 8 Note of Pad 4	C1 ... C6	41	
74	1	24 - 60	Scale 8 Note of Pad 5	C1 ... C6	43	
75	1	24 - 60	Scale 8 Note of Pad 6	C1 ... C6	44	
76	1	24 - 60	Scale 8 Note of Pad 7	C1 ... C6	46	
77	1		reserved		00	
78	1		reserved		00	
79	1		reserved		00	
7A	1		reserved		00	
7B	1		reserved		00	
7C	1		reserved		00	
7D	1		reserved		00	
7E	1		reserved		00	
7F	1		reserved		00	

TOTAL SIZE = 128 80 (HEX)

## Project Track

## General

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
30	5p	00	1	00 - 7F	Volume	0 - 127	64	
		01	1	01 - 7F	Pan	L63 ... C ... R63	40	
		02	1	01 - 7F	Velocity Limit Low	1 - 127	01	Not available for DX track
		03	1	01 - 7F	Velocity Limit High	1 - 127	7F	Not available for DX track
		04	1	00 - 7F	Note Limit Low	C-2 ... G8	00	Not available for DX track
		05	1	00 - 7F	Note Limit High	C-2 ... G8	7F	Not available for DX track
		06	1		reserved		00	
		07	1		reserved		00	
		08	1	00 - 7F	Group Number	Off, Group1, ..., Group127	00	
		09	1		reserved		00	
		0A	1		reserved		00	
		0B	1		reserved		00	
		0C	1	3E - 42	Octave	-2 - 0 - +2	40	Not available for Drum/SAMPLER Track
		0D	1		reserved		00	
		0E	1		reserved		00	
		0F	1	00 - 05	Pattern Select	1 - 6	00	
		10	1		reserved		00	
		11	1		reserved		00	
		12	1		reserved		00	
		13	1		reserved		00	
		14	1		reserved		00	
		15	1		reserved		00	
		16	2	00 - 01 00 - 7F	Pattern 1 Step MSB Pattern 1 Step LSB	1 - 128 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	00 10	
		18	2	00 - 01 00 - 7F	Pattern 2 Step MSB Pattern 2 Step LSB	..	00 10	
		1A	2	00 - 01 00 - 7F	Pattern 3 Step MSB Pattern 3 Step LSB	..	00 10	
		1C	2	00 - 01 00 - 7F	Pattern 4 Step MSB Pattern 4 Step LSB	..	00 10	
		1E	2	00 - 01 00 - 7F	Pattern 5 Step MSB Pattern 5 Step LSB	..	00 10	
		20	2	00 - 01 00 - 7F	Pattern 6 Step MSB Pattern 6 Step LSB	..	00 10	
		22	1		reserved		00	
		23	1		reserved		00	
		24	1		reserved		00	
		25	1		reserved		00	
		26	1		reserved		00	
		27	1		reserved		00	
		28	1		reserved		00	
		29	1	00,7D	Mute	0:off, 125:on	00	

TOTAL SIZE = 42 2A (HEX)

p = Part number

00 - 0A Part 1 - 11(Drum, Synth, DX, SAMPLER)

## Chord Notes of Scale 1 - 4

Address		size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
30	6p	00	1	00, 24 - 60	Pad 1 Chord Note 1 of Scale 1	0:off, 24 - 60:C1 ... C6	3C
		01	1	00, 24 - 60	Pad 1 Chord Note 2 of Scale 1	0:off, 24 - 60:C1 ... C6	3F
		02	1	00, 24 - 60	Pad 1 Chord Note 3 of Scale 1	0:off, 24 - 60:C1 ... C6	43
		03	1	00, 24 - 60	Pad 1 Chord Note 4 of Scale 1	0:off, 24 - 60:C1 ... C6	46
		04	1	00, 24 - 60	Pad 2 Chord Note 1 of Scale 1	0:off, 24 - 60:C1 ... C6	3E
		05	1	00, 24 - 60	Pad 2 Chord Note 2 of Scale 1	0:off, 24 - 60:C1 ... C6	41
		06	1	00, 24 - 60	Pad 2 Chord Note 3 of Scale 1	0:off, 24 - 60:C1 ... C6	44
		07	1	00, 24 - 60	Pad 2 Chord Note 4 of Scale 1	0:off, 24 - 60:C1 ... C6	48
		08	1	00, 24 - 60	Pad 3 Chord Note 1 of Scale 1	0:off, 24 - 60:C1 ... C6	3F
		09	1	00, 24 - 60	Pad 3 Chord Note 2 of Scale 1	0:off, 24 - 60:C1 ... C6	43
		0A	1	00, 24 - 60	Pad 3 Chord Note 3 of Scale 1	0:off, 24 - 60:C1 ... C6	46
		0B	1	00, 24 - 60	Pad 3 Chord Note 4 of Scale 1	0:off, 24 - 60:C1 ... C6	4A
		0C	1	00, 24 - 60	Pad 4 Chord Note 1 of Scale 1	0:off, 24 - 60:C1 ... C6	41
		0D	1	00, 24 - 60	Pad 4 Chord Note 2 of Scale 1	0:off, 24 - 60:C1 ... C6	44
		0E	1	00, 24 - 60	Pad 4 Chord Note 3 of Scale 1	0:off, 24 - 60:C1 ... C6	48
		0F	1	00, 24 - 60	Pad 4 Chord Note 4 of Scale 1	0:off, 24 - 60:C1 ... C6	4B
		10	1	00, 24 - 60	Pad 5 Chord Note 1 of Scale 1	0:off, 24 - 60:C1 ... C6	43
		11	1	00, 24 - 60	Pad 5 Chord Note 2 of Scale 1	0:off, 24 - 60:C1 ... C6	46
		12	1	00, 24 - 60	Pad 5 Chord Note 3 of Scale 1	0:off, 24 - 60:C1 ... C6	4A
		13	1	00, 24 - 60	Pad 5 Chord Note 4 of Scale 1	0:off, 24 - 60:C1 ... C6	4D
		14	1	00, 24 - 60	Pad 6 Chord Note 1 of Scale 1	0:off, 24 - 60:C1 ... C6	44
		15	1	00, 24 - 60	Pad 6 Chord Note 2 of Scale 1	0:off, 24 - 60:C1 ... C6	48
		16	1	00, 24 - 60	Pad 6 Chord Note 3 of Scale 1	0:off, 24 - 60:C1 ... C6	4B
		17	1	00, 24 - 60	Pad 6 Chord Note 4 of Scale 1	0:off, 24 - 60:C1 ... C6	4F
		18	1	00, 24 - 60	Pad 7 Chord Note 1 of Scale 1	0:off, 24 - 60:C1 ... C6	46
		19	1	00, 24 - 60	Pad 7 Chord Note 2 of Scale 1	0:off, 24 - 60:C1 ... C6	4A
		1A	1	00, 24 - 60	Pad 7 Chord Note 3 of Scale 1	0:off, 24 - 60:C1 ... C6	4D
		1B	1	00, 24 - 60	Pad 7 Chord Note 4 of Scale 1	0:off, 24 - 60:C1 ... C6	50
		1C	1		reserved		00
		1D	1		reserved		00
		1E	1		reserved		00
		1F	1		reserved		00
		20	1	00, 24 - 60	Pad 1 Chord Note 1 of Scale 2	0:off, 24 - 60:C1 ... C6	3C
		21	1	00, 24 - 60	Pad 1 Chord Note 2 of Scale 2	0:off, 24 - 60:C1 ... C6	40
		22	1	00, 24 - 60	Pad 1 Chord Note 3 of Scale 2	0:off, 24 - 60:C1 ... C6	43
		23	1	00, 24 - 60	Pad 1 Chord Note 4 of Scale 2	0:off, 24 - 60:C1 ... C6	47
		24	1	00, 24 - 60	Pad 2 Chord Note 1 of Scale 2	0:off, 24 - 60:C1 ... C6	3E
		25	1	00, 24 - 60	Pad 2 Chord Note 2 of Scale 2	0:off, 24 - 60:C1 ... C6	41
		26	1	00, 24 - 60	Pad 2 Chord Note 3 of Scale 2	0:off, 24 - 60:C1 ... C6	45
		27	1	00, 24 - 60	Pad 2 Chord Note 4 of Scale 2	0:off, 24 - 60:C1 ... C6	48
		28	1	00, 24 - 60	Pad 3 Chord Note 1 of Scale 2	0:off, 24 - 60:C1 ... C6	40
		29	1	00, 24 - 60	Pad 3 Chord Note 2 of Scale 2	0:off, 24 - 60:C1 ... C6	43
		2A	1	00, 24 - 60	Pad 3 Chord Note 3 of Scale 2	0:off, 24 - 60:C1 ... C6	47
		2B	1	00, 24 - 60	Pad 3 Chord Note 4 of Scale 2	0:off, 24 - 60:C1 ... C6	4A
		2C	1	00, 24 - 60	Pad 4 Chord Note 1 of Scale 2	0:off, 24 - 60:C1 ... C6	41
		2D	1	00, 24 - 60	Pad 4 Chord Note 2 of Scale 2	0:off, 24 - 60:C1 ... C6	45
		2E	1	00, 24 - 60	Pad 4 Chord Note 3 of Scale 2	0:off, 24 - 60:C1 ... C6	48
		2F	1	00, 24 - 60	Pad 4 Chord Note 4 of Scale 2	0:off, 24 - 60:C1 ... C6	4C
		30	1	00, 24 - 60	Pad 5 Chord Note 1 of Scale 2	0:off, 24 - 60:C1 ... C6	43
		31	1	00, 24 - 60	Pad 5 Chord Note 2 of Scale 2	0:off, 24 - 60:C1 ... C6	47
		32	1	00, 24 - 60	Pad 5 Chord Note 3 of Scale 2	0:off, 24 - 60:C1 ... C6	4A
		33	1	00, 24 - 60	Pad 5 Chord Note 4 of Scale 2	0:off, 24 - 60:C1 ... C6	4D
		34	1	00, 24 - 60	Pad 6 Chord Note 1 of Scale 2	0:off, 24 - 60:C1 ... C6	45
		35	1	00, 24 - 60	Pad 6 Chord Note 2 of Scale 2	0:off, 24 - 60:C1 ... C6	48
		36	1	00, 24 - 60	Pad 6 Chord Note 3 of Scale 2	0:off, 24 - 60:C1 ... C6	4C
		37	1	00, 24 - 60	Pad 6 Chord Note 4 of Scale 2	0:off, 24 - 60:C1 ... C6	4F
		38	1	00, 24 - 60	Pad 7 Chord Note 1 of Scale 2	0:off, 24 - 60:C1 ... C6	47
		39	1	00, 24 - 60	Pad 7 Chord Note 2 of Scale 2	0:off, 24 - 60:C1 ... C6	4A
		3A	1	00, 24 - 60	Pad 7 Chord Note 3 of Scale 2	0:off, 24 - 60:C1 ... C6	4D
		3B	1	00, 24 - 60	Pad 7 Chord Note 4 of Scale 2	0:off, 24 - 60:C1 ... C6	51
		3C	1		reserved		00
		3D	1		reserved		00
		3E	1		reserved		00
		3F	1		reserved		00
		40	1	00, 24 - 60	Pad 1 Chord Note 1 of Scale 3	0:off, 24 - 60:C1 ... C6	3C
		41	1	00, 24 - 60	Pad 1 Chord Note 2 of Scale 3	0:off, 24 - 60:C1 ... C6	3F
		42	1	00, 24 - 60	Pad 1 Chord Note 3 of Scale 3	0:off, 24 - 60:C1 ... C6	43
		43	1	00, 24 - 60	Pad 1 Chord Note 4 of Scale 3	0:off, 24 - 60:C1 ... C6	46

# MIDI Data Table

Address	size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
44	1	00, 24 - 60	Pad 2 Chord Note 1 of Scale 3	0:off, 24 - 60:C1 ... C6	3E	
45	1	00, 24 - 60	Pad 2 Chord Note 2 of Scale 3	0:off, 24 - 60:C1 ... C6	41	
46	1	00, 24 - 60	Pad 2 Chord Note 3 of Scale 3	0:off, 24 - 60:C1 ... C6	44	
47	1	00, 24 - 60	Pad 2 Chord Note 4 of Scale 3	0:off, 24 - 60:C1 ... C6	48	
48	1	00, 24 - 60	Pad 3 Chord Note 1 of Scale 3	0:off, 24 - 60:C1 ... C6	3F	
49	1	00, 24 - 60	Pad 3 Chord Note 2 of Scale 3	0:off, 24 - 60:C1 ... C6	43	
4A	1	00, 24 - 60	Pad 3 Chord Note 3 of Scale 3	0:off, 24 - 60:C1 ... C6	46	
4B	1	00, 24 - 60	Pad 3 Chord Note 4 of Scale 3	0:off, 24 - 60:C1 ... C6	4A	
4C	1	00, 24 - 60	Pad 4 Chord Note 1 of Scale 3	0:off, 24 - 60:C1 ... C6	41	
4D	1	00, 24 - 60	Pad 4 Chord Note 2 of Scale 3	0:off, 24 - 60:C1 ... C6	44	
4E	1	00, 24 - 60	Pad 4 Chord Note 3 of Scale 3	0:off, 24 - 60:C1 ... C6	48	
4F	1	00, 24 - 60	Pad 4 Chord Note 4 of Scale 3	0:off, 24 - 60:C1 ... C6	4B	
50	1	00, 24 - 60	Pad 5 Chord Note 1 of Scale 3	0:off, 24 - 60:C1 ... C6	43	
51	1	00, 24 - 60	Pad 5 Chord Note 2 of Scale 3	0:off, 24 - 60:C1 ... C6	46	
52	1	00, 24 - 60	Pad 5 Chord Note 3 of Scale 3	0:off, 24 - 60:C1 ... C6	4A	
53	1	00, 24 - 60	Pad 5 Chord Note 4 of Scale 3	0:off, 24 - 60:C1 ... C6	4D	
54	1	00, 24 - 60	Pad 6 Chord Note 1 of Scale 3	0:off, 24 - 60:C1 ... C6	44	
55	1	00, 24 - 60	Pad 6 Chord Note 2 of Scale 3	0:off, 24 - 60:C1 ... C6	48	
56	1	00, 24 - 60	Pad 6 Chord Note 3 of Scale 3	0:off, 24 - 60:C1 ... C6	4B	
57	1	00, 24 - 60	Pad 6 Chord Note 4 of Scale 3	0:off, 24 - 60:C1 ... C6	4F	
58	1	00, 24 - 60	Pad 7 Chord Note 1 of Scale 3	0:off, 24 - 60:C1 ... C6	46	
59	1	00, 24 - 60	Pad 7 Chord Note 2 of Scale 3	0:off, 24 - 60:C1 ... C6	4A	
5A	1	00, 24 - 60	Pad 7 Chord Note 3 of Scale 3	0:off, 24 - 60:C1 ... C6	4D	
5B	1	00, 24 - 60	Pad 7 Chord Note 4 of Scale 3	0:off, 24 - 60:C1 ... C6	50	
5C	1		reserved		00	
5D	1		reserved		00	
5E	1		reserved		00	
5F	1		reserved		00	
60	1	00, 24 - 60	Pad 1 Chord Note 1 of Scale 4	0:off, 24 - 60:C1 ... C6	3C	
61	1	00, 24 - 60	Pad 1 Chord Note 2 of Scale 4	0:off, 24 - 60:C1 ... C6	40	
62	1	00, 24 - 60	Pad 1 Chord Note 3 of Scale 4	0:off, 24 - 60:C1 ... C6	43	
63	1	00, 24 - 60	Pad 1 Chord Note 4 of Scale 4	0:off, 24 - 60:C1 ... C6	47	
64	1	00, 24 - 60	Pad 2 Chord Note 1 of Scale 4	0:off, 24 - 60:C1 ... C6	3E	
65	1	00, 24 - 60	Pad 2 Chord Note 2 of Scale 4	0:off, 24 - 60:C1 ... C6	41	
66	1	00, 24 - 60	Pad 2 Chord Note 3 of Scale 4	0:off, 24 - 60:C1 ... C6	45	
67	1	00, 24 - 60	Pad 2 Chord Note 4 of Scale 4	0:off, 24 - 60:C1 ... C6	48	
68	1	00, 24 - 60	Pad 3 Chord Note 1 of Scale 4	0:off, 24 - 60:C1 ... C6	40	
69	1	00, 24 - 60	Pad 3 Chord Note 2 of Scale 4	0:off, 24 - 60:C1 ... C6	43	
6A	1	00, 24 - 60	Pad 3 Chord Note 3 of Scale 4	0:off, 24 - 60:C1 ... C6	47	
6B	1	00, 24 - 60	Pad 3 Chord Note 4 of Scale 4	0:off, 24 - 60:C1 ... C6	4A	
6C	1	00, 24 - 60	Pad 4 Chord Note 1 of Scale 4	0:off, 24 - 60:C1 ... C6	41	
6D	1	00, 24 - 60	Pad 4 Chord Note 2 of Scale 4	0:off, 24 - 60:C1 ... C6	45	
6E	1	00, 24 - 60	Pad 4 Chord Note 3 of Scale 4	0:off, 24 - 60:C1 ... C6	48	
6F	1	00, 24 - 60	Pad 4 Chord Note 4 of Scale 4	0:off, 24 - 60:C1 ... C6	4C	
70	1	00, 24 - 60	Pad 5 Chord Note 1 of Scale 4	0:off, 24 - 60:C1 ... C6	43	
71	1	00, 24 - 60	Pad 5 Chord Note 2 of Scale 4	0:off, 24 - 60:C1 ... C6	47	
72	1	00, 24 - 60	Pad 5 Chord Note 3 of Scale 4	0:off, 24 - 60:C1 ... C6	4A	
73	1	00, 24 - 60	Pad 5 Chord Note 4 of Scale 4	0:off, 24 - 60:C1 ... C6	4D	
74	1	00, 24 - 60	Pad 6 Chord Note 1 of Scale 4	0:off, 24 - 60:C1 ... C6	45	
75	1	00, 24 - 60	Pad 6 Chord Note 2 of Scale 4	0:off, 24 - 60:C1 ... C6	48	
76	1	00, 24 - 60	Pad 6 Chord Note 3 of Scale 4	0:off, 24 - 60:C1 ... C6	4C	
77	1	00, 24 - 60	Pad 6 Chord Note 4 of Scale 4	0:off, 24 - 60:C1 ... C6	4F	
78	1	00, 24 - 60	Pad 7 Chord Note 1 of Scale 4	0:off, 24 - 60:C1 ... C6	47	
79	1	00, 24 - 60	Pad 7 Chord Note 2 of Scale 4	0:off, 24 - 60:C1 ... C6	4A	
7A	1	00, 24 - 60	Pad 7 Chord Note 3 of Scale 4	0:off, 24 - 60:C1 ... C6	4D	
7B	1	00, 24 - 60	Pad 7 Chord Note 4 of Scale 4	0:off, 24 - 60:C1 ... C6	51	
7C	1		reserved		00	
7D	1		reserved		00	
7E	1		reserved		00	
7F	1		reserved		00	

TOTAL SIZE = 128 80 (HEX)

p = Part number

07 - 09 Part 8 - 10(Synth, DX)

## Chord Notes of Scale 5 - 8

Address		size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
30	7p	00	1	00, 24 - 60	Pad 1 Chord Note 1 of Scale 5	0:off, 24 - 60:C1 ... C6	3C
		01	1	00, 24 - 60	Pad 1 Chord Note 2 of Scale 5	0:off, 24 - 60:C1 ... C6	40
		02	1	00, 24 - 60	Pad 1 Chord Note 3 of Scale 5	0:off, 24 - 60:C1 ... C6	43
		03	1	00, 24 - 60	Pad 1 Chord Note 4 of Scale 5	0:off, 24 - 60:C1 ... C6	47
		04	1	00, 24 - 60	Pad 2 Chord Note 1 of Scale 5	0:off, 24 - 60:C1 ... C6	3E
		05	1	00, 24 - 60	Pad 2 Chord Note 2 of Scale 5	0:off, 24 - 60:C1 ... C6	42
		06	1	00, 24 - 60	Pad 2 Chord Note 3 of Scale 5	0:off, 24 - 60:C1 ... C6	45
		07	1	00, 24 - 60	Pad 2 Chord Note 4 of Scale 5	0:off, 24 - 60:C1 ... C6	00
		08	1	00, 24 - 60	Pad 3 Chord Note 1 of Scale 5	0:off, 24 - 60:C1 ... C6	3E
		09	1	00, 24 - 60	Pad 3 Chord Note 2 of Scale 5	0:off, 24 - 60:C1 ... C6	40
		0A	1	00, 24 - 60	Pad 3 Chord Note 3 of Scale 5	0:off, 24 - 60:C1 ... C6	43
		0B	1	00, 24 - 60	Pad 3 Chord Note 4 of Scale 5	0:off, 24 - 60:C1 ... C6	47
		0C	1	00, 24 - 60	Pad 4 Chord Note 1 of Scale 5	0:off, 24 - 60:C1 ... C6	3C
		0D	1	00, 24 - 60	Pad 4 Chord Note 2 of Scale 5	0:off, 24 - 60:C1 ... C6	3E
		0E	1	00, 24 - 60	Pad 4 Chord Note 3 of Scale 5	0:off, 24 - 60:C1 ... C6	43
		0F	1	00, 24 - 60	Pad 4 Chord Note 4 of Scale 5	0:off, 24 - 60:C1 ... C6	45
		10	1	00, 24 - 60	Pad 5 Chord Note 1 of Scale 5	0:off, 24 - 60:C1 ... C6	3E
		11	1	00, 24 - 60	Pad 5 Chord Note 2 of Scale 5	0:off, 24 - 60:C1 ... C6	42
		12	1	00, 24 - 60	Pad 5 Chord Note 3 of Scale 5	0:off, 24 - 60:C1 ... C6	43
		13	1	00, 24 - 60	Pad 5 Chord Note 4 of Scale 5	0:off, 24 - 60:C1 ... C6	47
		14	1	00, 24 - 60	Pad 6 Chord Note 1 of Scale 5	0:off, 24 - 60:C1 ... C6	3C
		15	1	00, 24 - 60	Pad 6 Chord Note 2 of Scale 5	0:off, 24 - 60:C1 ... C6	40
		16	1	00, 24 - 60	Pad 6 Chord Note 3 of Scale 5	0:off, 24 - 60:C1 ... C6	43
		17	1	00, 24 - 60	Pad 6 Chord Note 4 of Scale 5	0:off, 24 - 60:C1 ... C6	45
		18	1	00, 24 - 60	Pad 7 Chord Note 1 of Scale 5	0:off, 24 - 60:C1 ... C6	3E
		19	1	00, 24 - 60	Pad 7 Chord Note 2 of Scale 5	0:off, 24 - 60:C1 ... C6	42
		1A	1	00, 24 - 60	Pad 7 Chord Note 3 of Scale 5	0:off, 24 - 60:C1 ... C6	45
		1B	1	00, 24 - 60	Pad 7 Chord Note 4 of Scale 5	0:off, 24 - 60:C1 ... C6	47
		1C	1		reserved		00
		1D	1		reserved		00
		1E	1		reserved		00
		1F	1		reserved		00
		20	1	00, 24 - 60	Pad 1 Chord Note 1 of Scale 6	0:off, 24 - 60:C1 ... C6	3C
		21	1	00, 24 - 60	Pad 1 Chord Note 2 of Scale 6	0:off, 24 - 60:C1 ... C6	3F
		22	1	00, 24 - 60	Pad 1 Chord Note 3 of Scale 6	0:off, 24 - 60:C1 ... C6	43
		23	1	00, 24 - 60	Pad 1 Chord Note 4 of Scale 6	0:off, 24 - 60:C1 ... C6	46
		24	1	00, 24 - 60	Pad 2 Chord Note 1 of Scale 6	0:off, 24 - 60:C1 ... C6	3C
		25	1	00, 24 - 60	Pad 2 Chord Note 2 of Scale 6	0:off, 24 - 60:C1 ... C6	3E
		26	1	00, 24 - 60	Pad 2 Chord Note 3 of Scale 6	0:off, 24 - 60:C1 ... C6	41
		27	1	00, 24 - 60	Pad 2 Chord Note 4 of Scale 6	0:off, 24 - 60:C1 ... C6	45
		28	1	00, 24 - 60	Pad 3 Chord Note 1 of Scale 6	0:off, 24 - 60:C1 ... C6	3E
		29	1	00, 24 - 60	Pad 3 Chord Note 2 of Scale 6	0:off, 24 - 60:C1 ... C6	3F
		2A	1	00, 24 - 60	Pad 3 Chord Note 3 of Scale 6	0:off, 24 - 60:C1 ... C6	43
		2B	1	00, 24 - 60	Pad 3 Chord Note 4 of Scale 6	0:off, 24 - 60:C1 ... C6	46
		2C	1	00, 24 - 60	Pad 4 Chord Note 1 of Scale 6	0:off, 24 - 60:C1 ... C6	3C
		2D	1	00, 24 - 60	Pad 4 Chord Note 2 of Scale 6	0:off, 24 - 60:C1 ... C6	41
		2E	1	00, 24 - 60	Pad 4 Chord Note 3 of Scale 6	0:off, 24 - 60:C1 ... C6	45
		2F	1	00, 24 - 60	Pad 4 Chord Note 4 of Scale 6	0:off, 24 - 60:C1 ... C6	00
		30	1	00, 24 - 60	Pad 5 Chord Note 1 of Scale 6	0:off, 24 - 60:C1 ... C6	3E
		31	1	00, 24 - 60	Pad 5 Chord Note 2 of Scale 6	0:off, 24 - 60:C1 ... C6	41
		32	1	00, 24 - 60	Pad 5 Chord Note 3 of Scale 6	0:off, 24 - 60:C1 ... C6	43
		33	1	00, 24 - 60	Pad 5 Chord Note 4 of Scale 6	0:off, 24 - 60:C1 ... C6	46
		34	1	00, 24 - 60	Pad 6 Chord Note 1 of Scale 6	0:off, 24 - 60:C1 ... C6	3C
		35	1	00, 24 - 60	Pad 6 Chord Note 2 of Scale 6	0:off, 24 - 60:C1 ... C6	3F
		36	1	00, 24 - 60	Pad 6 Chord Note 3 of Scale 6	0:off, 24 - 60:C1 ... C6	41
		37	1	00, 24 - 60	Pad 6 Chord Note 4 of Scale 6	0:off, 24 - 60:C1 ... C6	46
		38	1	00, 24 - 60	Pad 7 Chord Note 1 of Scale 6	0:off, 24 - 60:C1 ... C6	3E
		39	1	00, 24 - 60	Pad 7 Chord Note 2 of Scale 6	0:off, 24 - 60:C1 ... C6	41
		3A	1	00, 24 - 60	Pad 7 Chord Note 3 of Scale 6	0:off, 24 - 60:C1 ... C6	45
		3B	1	00, 24 - 60	Pad 7 Chord Note 4 of Scale 6	0:off, 24 - 60:C1 ... C6	46
		3C	1		reserved		00
		3D	1		reserved		00
		3E	1		reserved		00
		3F	1		reserved		00
		40	1	00, 24 - 60	Pad 1 Chord Note 1 of Scale 7	0:off, 24 - 60:C1 ... C6	3C
		41	1	00, 24 - 60	Pad 1 Chord Note 2 of Scale 7	0:off, 24 - 60:C1 ... C6	40
		42	1	00, 24 - 60	Pad 1 Chord Note 3 of Scale 7	0:off, 24 - 60:C1 ... C6	43
		43	1	00, 24 - 60	Pad 1 Chord Note 4 of Scale 7	0:off, 24 - 60:C1 ... C6	00

# MIDI Data Table

Address	size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes		
		44	1	00, 24 - 60	Pad 2 Chord Note 1 of Scale 7	0:off, 24 - 60:C1 ... C6	3C	
		45	1	00, 24 - 60	Pad 2 Chord Note 2 of Scale 7	0:off, 24 - 60:C1 ... C6	3E	
		46	1	00, 24 - 60	Pad 2 Chord Note 3 of Scale 7	0:off, 24 - 60:C1 ... C6	41	
		47	1	00, 24 - 60	Pad 2 Chord Note 4 of Scale 7	0:off, 24 - 60:C1 ... C6	45	
		48	1	00, 24 - 60	Pad 3 Chord Note 1 of Scale 7	0:off, 24 - 60:C1 ... C6	3C	
		49	1	00, 24 - 60	Pad 3 Chord Note 2 of Scale 7	0:off, 24 - 60:C1 ... C6	41	
		4A	1	00, 24 - 60	Pad 3 Chord Note 3 of Scale 7	0:off, 24 - 60:C1 ... C6	43	
		4B	1	00, 24 - 60	Pad 3 Chord Note 4 of Scale 7	0:off, 24 - 60:C1 ... C6	46	
		4C	1	00, 24 - 60	Pad 4 Chord Note 1 of Scale 7	0:off, 24 - 60:C1 ... C6	3C	
		4D	1	00, 24 - 60	Pad 4 Chord Note 2 of Scale 7	0:off, 24 - 60:C1 ... C6	40	
		4E	1	00, 24 - 60	Pad 4 Chord Note 3 of Scale 7	0:off, 24 - 60:C1 ... C6	41	
		4F	1	00, 24 - 60	Pad 4 Chord Note 4 of Scale 7	0:off, 24 - 60:C1 ... C6	45	
		50	1	00, 24 - 60	Pad 5 Chord Note 1 of Scale 7	0:off, 24 - 60:C1 ... C6	3E	
		51	1	00, 24 - 60	Pad 5 Chord Note 2 of Scale 7	0:off, 24 - 60:C1 ... C6	41	
		52	1	00, 24 - 60	Pad 5 Chord Note 3 of Scale 7	0:off, 24 - 60:C1 ... C6	43	
		53	1	00, 24 - 60	Pad 5 Chord Note 4 of Scale 7	0:off, 24 - 60:C1 ... C6	46	
		54	1	00, 24 - 60	Pad 6 Chord Note 1 of Scale 7	0:off, 24 - 60:C1 ... C6	3C	
		55	1	00, 24 - 60	Pad 6 Chord Note 2 of Scale 7	0:off, 24 - 60:C1 ... C6	40	
		56	1	00, 24 - 60	Pad 6 Chord Note 3 of Scale 7	0:off, 24 - 60:C1 ... C6	43	
		57	1	00, 24 - 60	Pad 6 Chord Note 4 of Scale 7	0:off, 24 - 60:C1 ... C6	45	
		58	1	00, 24 - 60	Pad 7 Chord Note 1 of Scale 7	0:off, 24 - 60:C1 ... C6	3E	
		59	1	00, 24 - 60	Pad 7 Chord Note 2 of Scale 7	0:off, 24 - 60:C1 ... C6	41	
		5A	1	00, 24 - 60	Pad 7 Chord Note 3 of Scale 7	0:off, 24 - 60:C1 ... C6	45	
		5B	1	00, 24 - 60	Pad 7 Chord Note 4 of Scale 7	0:off, 24 - 60:C1 ... C6	46	
		5C	1		reserved		00	
		5D	1		reserved		00	
		5E	1		reserved		00	
		5F	1		reserved		00	
		60	1	00, 24 - 60	Pad 1 Chord Note 1 of Scale 8	0:off, 24 - 60:C1 ... C6	3C	
		61	1	00, 24 - 60	Pad 1 Chord Note 2 of Scale 8	0:off, 24 - 60:C1 ... C6	3F	
		62	1	00, 24 - 60	Pad 1 Chord Note 3 of Scale 8	0:off, 24 - 60:C1 ... C6	43	
		63	1	00, 24 - 60	Pad 1 Chord Note 4 of Scale 8	0:off, 24 - 60:C1 ... C6	46	
		64	1	00, 24 - 60	Pad 2 Chord Note 1 of Scale 8	0:off, 24 - 60:C1 ... C6	3C	
		65	1	00, 24 - 60	Pad 2 Chord Note 2 of Scale 8	0:off, 24 - 60:C1 ... C6	3D	
		66	1	00, 24 - 60	Pad 2 Chord Note 3 of Scale 8	0:off, 24 - 60:C1 ... C6	41	
		67	1	00, 24 - 60	Pad 2 Chord Note 4 of Scale 8	0:off, 24 - 60:C1 ... C6	44	
		68	1	00, 24 - 60	Pad 3 Chord Note 1 of Scale 8	0:off, 24 - 60:C1 ... C6	3F	
		69	1	00, 24 - 60	Pad 3 Chord Note 2 of Scale 8	0:off, 24 - 60:C1 ... C6	43	
		6A	1	00, 24 - 60	Pad 3 Chord Note 3 of Scale 8	0:off, 24 - 60:C1 ... C6	46	
		6B	1	00, 24 - 60	Pad 3 Chord Note 4 of Scale 8	0:off, 24 - 60:C1 ... C6	00	
		6C	1	00, 24 - 60	Pad 4 Chord Note 1 of Scale 8	0:off, 24 - 60:C1 ... C6	3C	
		6D	1	00, 24 - 60	Pad 4 Chord Note 2 of Scale 8	0:off, 24 - 60:C1 ... C6	3F	
		6E	1	00, 24 - 60	Pad 4 Chord Note 3 of Scale 8	0:off, 24 - 60:C1 ... C6	41	
		6F	1	00, 24 - 60	Pad 4 Chord Note 4 of Scale 8	0:off, 24 - 60:C1 ... C6	44	
		70	1	00, 24 - 60	Pad 5 Chord Note 1 of Scale 8	0:off, 24 - 60:C1 ... C6	3D	
		71	1	00, 24 - 60	Pad 5 Chord Note 2 of Scale 8	0:off, 24 - 60:C1 ... C6	3F	
		72	1	00, 24 - 60	Pad 5 Chord Note 3 of Scale 8	0:off, 24 - 60:C1 ... C6	44	
		73	1	00, 24 - 60	Pad 5 Chord Note 4 of Scale 8	0:off, 24 - 60:C1 ... C6	46	
		74	1	00, 24 - 60	Pad 6 Chord Note 1 of Scale 8	0:off, 24 - 60:C1 ... C6	3C	
		75	1	00, 24 - 60	Pad 6 Chord Note 2 of Scale 8	0:off, 24 - 60:C1 ... C6	3F	
		76	1	00, 24 - 60	Pad 6 Chord Note 3 of Scale 8	0:off, 24 - 60:C1 ... C6	43	
		77	1	00, 24 - 60	Pad 6 Chord Note 4 of Scale 8	0:off, 24 - 60:C1 ... C6	44	
		78	1	00, 24 - 60	Pad 7 Chord Note 1 of Scale 8	0:off, 24 - 60:C1 ... C6	3D	
		79	1	00, 24 - 60	Pad 7 Chord Note 2 of Scale 8	0:off, 24 - 60:C1 ... C6	41	
		7A	1	00, 24 - 60	Pad 7 Chord Note 3 of Scale 8	0:off, 24 - 60:C1 ... C6	44	
		7B	1	00, 24 - 60	Pad 7 Chord Note 4 of Scale 8	0:off, 24 - 60:C1 ... C6	46	
		7C	1		reserved		00	
		7D	1		reserved		00	
		7E	1		reserved		00	
		7F	1		reserved		00	

TOTAL SIZE = 128 80 (HEX)

p = Part number

07 - 09 Part 8 - 10(Synth, DX)



## Sound Common

Name

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
31	0p	00	1	00 - 7F	Sound Name 1		00	UTF8 (7-bit encoded)
		01	1	00 - 7F	Sound Name 2		00	..
		02	1	00 - 7F	Sound Name 3		00	..
		03	1	00 - 7F	Sound Name 4		00	..
		04	1	00 - 7F	Sound Name 5		00	..
		05	1	00 - 7F	Sound Name 6		00	..
		06	1	00 - 7F	Sound Name 7		00	..
		07	1	00 - 7F	Sound Name 8		00	..
		08	1	00 - 7F	Sound Name 9		00	..
		09	1	00 - 7F	Sound Name 10		00	..
		0A	1	00 - 7F	Sound Name 11		00	..
		0B	1	00 - 7F	Sound Name 12		00	..
		0C	1	00 - 7F	Sound Name 13		00	..
		0D	1	00 - 7F	Sound Name 14		00	..
		0E	1	00 - 7F	Sound Name 15		00	..
		0F	1	00 - 7F	Sound Name 16		00	..
		10	1	00 - 7F	Sound Name 17		00	..
		11	1	00 - 7F	Sound Name 18		00	..
		12	1	00 - 7F	Sound Name 19		00	..
		13	1	00 - 7F	Sound Name 20		00	..
		14	1	00 - 7F	Sound Name 21		00	..
		15	1	00 - 7F	Sound Name 22		00	..
		16	1	00 - 7F	Sound Name 23		00	..
		17	1	00 - 7F	Sound Name 24		00	..
		18	1	00 - 7F	Sound Name 25		00	..
		19	1	00 - 7F	Sound Name 26		00	..
		1A	1	00 - 7F	Sound Name 27		00	..
		1B	1	00 - 7F	Sound Name 28		00	..
		1C	1	00 - 7F	Sound Name 29		00	..
		1D	1	00 - 7F	Sound Name 30		00	..
		1E	1	00 - 7F	Sound Name 31		00	..
		1F	1	00 - 7F	Sound Name 32		00	..
		20	1	00 - 7F	Sound Name 33		00	..
		21	1	00 - 7F	Sound Name 34		00	..
		22	1	00 - 7F	Sound Name 35		00	..
		23	1	00 - 7F	Sound Name 36		00	..
		24	1	00 - 7F	Sound Name 37		00	..
		25	1	00 - 7F	Sound Name 38		00	..
		26	1	00 - 7F	Sound Name 39		00	..
		27	1	00 - 7F	Sound Name 40		00	..
		28	1	00 - 7F	Sound Name 41		00	..
		29	1	00 - 7F	Sound Name 42		00	..
		2A	1	00 - 7F	Sound Name 43		00	..
		2B	1	00 - 7F	Sound Name 44		00	..
		2C	1	00 - 7F	Sound Name 45		00	..
		2D	1	00 - 7F	Sound Name 46		00	..
		2E	1	00 - 7F	Sound Name 47		00	..
		2F	1	00 - 7F	Sound Name 48		00	..
		30	1	00 - 7F	Sound Name 49		00	..
		31	1	00 - 7F	Sound Name 50		00	..
		32	1	00 - 7F	Sound Name 51		00	..
		33	1	00 - 7F	Sound Name 52		00	..
		34	1	00 - 7F	Sound Name 53		00	..
		35	1	00 - 7F	Sound Name 54		00	..
		36	1	00 - 7F	Sound Name 55		00	..
		37	1	00 - 7F	Sound Name 56		00	..
		38	1	00 - 7F	Sound Name 57		00	..
		39	1	00 - 7F	Sound Name 58		00	..
		3A	1	00 - 7F	Sound Name 59		00	..
		3B	1	00 - 7F	Sound Name 60		00	..
		3C	1	00 - 7F	Sound Name 61		00	..
		3D	1	00 - 7F	Sound Name 62		00	..
		3E	1	00 - 7F	Sound Name 63		00	..
		3F	1	00 - 7F	Sound Name 64		00	..
		40	1	00 - 7F	Sound Name 65		00	..
		41	1	00 - 7F	Sound Name 66		00	..

# MIDI Data Table

Address		size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
	42	1	00 - 7F	Sound Name 67		00	UTF8 (7-bit encoded)
	43	1	00 - 7F	Sound Name 68		00	..
	44	1	00 - 7F	Sound Name 69		00	..
	45	1	00 - 7F	Sound Name 70		00	..
	46	1	00 - 7F	Sound Name 71		00	..
	47	1	00 - 7F	Sound Name 72		00	..
	48	1	00 - 7F	Sound Name 73		00	..
	49	1	00 - 7F	Sound Name 74		00	..
	4A	1	00 - 7F	Sound Name 75		00	..
	4B	1	00 - 7F	Sound Name 76		00	..
	4C	1	00 - 7F	Sound Name 77		00	..
	4D	1	00 - 7F	Sound Name 78		00	..
	4E	1	00 - 7F	Sound Name 79		00	..
	4F	1	00 - 7F	Sound Name 80		00	..
	50	1	00 - 7F	Sound Name 81		00	..
	51	1	00 - 7F	Sound Name 82		00	..
	52	1	00 - 7F	Sound Name 83		00	..
	53	1	00 - 7F	Sound Name 84		00	..
	54	1	00 - 7F	Sound Name 85		00	..
	55	1	00 - 7F	Sound Name 86		00	..
	56	1	00 - 7F	Sound Name 87		00	..
	57	1	00 - 7F	Sound Name 88		00	..
	58	1	00 - 7F	Sound Name 89		00	..
	59	1	00 - 7F	Sound Name 90		00	..
	5A	1	00 - 7F	Sound Name 91		00	..
	5B	1	00 - 7F	Sound Name 92		00	..
	5C	1	00 - 7F	Sound Name 93		00	..
	5D	1	00 - 7F	Sound Name 94		00	..
	5E	1	00 - 7F	Sound Name 95		00	..
	5F	1	00 - 7F	Sound Name 96		00	..
	60	1	00 - 7F	Sound Name 97		00	..
	61	1	00 - 7F	Sound Name 98		00	..
	62	1	00 - 7F	Sound Name 99		00	..
	63	1	00 - 7F	Sound Name 100		00	..
	64	1		reserved		00	
	65	1		reserved		00	
	66	1		reserved		00	
	67	1		reserved		00	
	68	1		reserved		00	
	69	1		reserved		00	

TOTAL SIZE = 106 6A (HEX)

p = Part number

00 - 0A Part 1 - 11(Drum, Synth, DX, SAMPLER)

## General

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
31	1p	00	1	00 - 7F	AEG Decay/Release Offset	-64 - +63	40	Available for Synth track
		01	1	00 - 7F	Carrier Attack Offset	-64 - +63	40	Available for DX track
		02	1	00 - 7F	Carrier Decay Offset	-64 - +63	40	Available for DX track
		03	1	00 - 7F	Mod Amount Offset	-64 - +63	40	Available for DX track
		04	1	00 - 7F	Freq Ratio Offset	-64 - +63	40	Available for DX track
		05	1	00 - 7F	Feedback Offset	-64 - +63	40	Available for DX track
		06	1		reserved		00	
		07	1		reserved		00	
		08	1		reserved		00	
		09	1		reserved		00	
		0A	1		reserved		00	
		0B	1		reserved		00	
		0C	1		reserved		00	
		0D	1	00 - 02	Trigger/Gate Mode	Trigger, Gate, Depend on Voice	02	Not available for DX track
		0E	1		reserved		00	
		0F	1		reserved		00	
		10	1	10 - 58	Pitch Bend Range Upper	-48 - +24	42	Not available for DX track
		11	1	10 - 58	Pitch Bend Range Lower	-48 - +24	3E	Not available for DX track
		12	1	00 - 7F	Velocity Sense Depth	0 - 127	40	Not available for DX track
		13	1	00 - 7F	Velocity Sense Offset	0 - 127	40	Not available for DX track
		14	1	00 - 7F	Volume	0 - 127	64	
		15	1	01 - 7F	Pan	L63 ... C ... R63	40	
		16	1		reserved		00	
		17	2	00 - 0F 00 - 0F	Detune MSB Detune LSB	-12.8 - +12.7[Hz] 1st bit3-0 → bit7-4, 2nd bit3-0 → bit3-0	08 00 (80)	Not available for DX track
		19	1	00 - 7F	Reverb Send	0 - 127	00	
		1A	1	00 - 7F	Variation Send	0 - 127	00	
		1B	1	00 - 7F	Dry Level	0 - 127	7F	
		1C	1	28 - 58	Note Shift	-24 - +24[semitones]	40	
		1D	1		reserved		00	
		1E	1	00 - 01	Portamento Switch	Off, On	00	Not available for Drum/DX track
		1F	1	00 - 7F	Portamento Time	0 - 127	40	
		20	1	00 - 01	Portamento Mode	Fingered, Full-time	01	
		21	1	00 - 03	Portamento Time Mode	Rate 1, Time 1, Rate 2, Time 2	00	Not available for Drum/DX track
		22	1	00 - 01	Key Assign Mode	Single, Multi	01	Not available for Drum/DX track
		23	1	00 - 02	Mono/Poly Mode	Mono, Poly, Chord	01	Chord is not available for Drum/SAMPLER track
		24	2	00 - 0C	Micro Tuning Scale	Equal Temperament, Pure Major, Pure Minor, Werckmeister, Kirnberger, Valloti&Young, 1/4 Shift, 1/4 tone, 1/8 tone, Indian, Arabic 1, Arabic 2, Arabic 3	00 00 (00)	Not available for Drum/DX track
		26	1	00 - 0B	Micro Tuning Root	C, C#, ..., B	00	Not available for Drum/DX track
		27	1	00 - 07	Legato Slope	0 - 7	00	Not available for Drum/DX track
		28	1	01	Insertion Connect Type	Ins A->B	01	
		29	1	02 - 03	Insertion FX Switch	bit0: Insertion A Off/On, bit1: Insertion B Off/On, bit2-6: reserved	03	bit1 is fixed to On
		2A	1		reserved		00	
		2B	1	00 - 01	Element Pan on/off	Off, On	01	Not available for DX track
		2C	1	00 - 7F	AEG Attack Time	-64 - +63	40	
		2D	1	00 - 7F	AEG Decay Time	-64 - +63	40	
		2E	1	00 - 7F	AEG Sustain Level	-64 - +63	40	Not available for Drum/DX track
		2F	1	00 - 7F	AEG Release Time	-64 - +63	40	
		30	1	00 - 7F	FEG Attack Time	-64 - +63	40	Not available for Drum/DX track
		31	1	00 - 7F	FEG Decay Time	-64 - +63	40	Not available for Drum/DX track
		32	1	00 - 7F	FEG Sustain Level	-64 - +63	40	Not available for Drum/DX track
		33	1	00 - 7F	FEG Release Time	-64 - +63	40	Not available for Drum/DX track
		34	1	00 - 7F	FEG Depth	-64 - +63	40	Not available for Drum/DX track
		35	1		reserved		00	
		36	1	00 - 7F	Filter Cutoff Frequency	-64 - +63	40	
		37	1	00 - 7F	Filter Resonance/Width	-64 - +63	40	

# MIDI Data Table

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
		38	1		reserved		00	Not available for DX track
		39	2	00 - 01 00 - 7F	3bandEQ Low Frequency MSB 3bandEQ Low Frequency LSB	50.1 - 2.00k 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	00 6F	Not available for DX track
		3B	1	20 - 60	3bandEQ Low Gain	-32 - +32 (12.00 - +12.00[dB])	40	Not available for DX track
		3C	1		reserved		00	
		3D	2	00 - 01 00 - 7F	3bandEQ Mid Frequency MSB 3bandEQ Mid Frequency LSB	139.7 - 10.1k 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	01 0D	Not available for DX track
		3F	1	20 - 60	3bandEQ Mid Gain	-32 - +32 (-12.00 - +12.00[dB])	40	Not available for DX track
		40	1	00 - 1F	3bandEQ Mid Q	0 - 31 (0.7 - 10.3)	00	Not available for DX track
		41	2	01 03 - 7F	3bandEQ High Frequency MSB 3bandEQ High Frequency LSB	503.8 - 14.0k 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	01 1D	Not available for DX track
		43	1	20 - 60	3bandEQ High Gain	-32 - +32 (-12.00 - +12.00[dB])	40	Not available for DX track
		44	1		reserved		00	
		45	1	00 - 05	2bandEQ Low Type	Thru, LPF, HPF, Low Shelf, Hi Shelf, Peak/Dip	03	
		46	2	00 - 01 00 - 7F	2bandEQ Low Frequency MSB 2bandEQ Low Frequency LSB	63.0 - 18.0k 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	00 66	
		48	1	28 - 58	2bandEQ Low Gain	40 - 64 - 88 (-12.00 - +12.00[dB])	40	
		49	1	01 - 78	2bandEQ Low Q	0.1 - 12.0	01	
		4A	1	00 - 05	2bandEQ High Type	Thru, LPF, HPF, Low Shelf, Hi Shelf, Peak/Dip	04	
		4B	2	00 - 01 00 - 7F	2bandEQ High Frequency MSB 2bandEQ High Frequency LSB	63.0 - 18.0k 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	01 10	
		4D	1	28 - 58	2bandEQ High Gain	40 - 64 - 88 (-12.00 - +12.00[dB])	40	
		4E	1	01 - 78	2bandEQ High Q	0.1 - 12.0	01	
		4F	1	28 - 58	2bandEQ Output Gain	40 - 64 - 88 (-12.00 - +12.00[dB])	40	

TOTAL SIZE = 80 50 (HEX)

p = Part number

00 - 0A Part 1 - 11(Drum, Synth, DX, SAMPLER)

Insertion A

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
31	2p	00	2	00 - 7F 00 - 7F	Insertion-A Type MSB Insertion-A Type LSB	Refer to Effect Parameter List	00 00	
		02	1	00 - 7F	Insertion-A Template Number	~	00	
		03	2	00 - 7F 00 - 7F	Insertion-A Parameter 1 MSB Insertion-A Parameter 1 LSB	~	00 00	
		05	2	00 - 7F 00 - 7F	Insertion-A Parameter 2 MSB Insertion-A Parameter 2 LSB	~	00 00	
		07	2	00 - 7F 00 - 7F	Insertion-A Parameter3 MSB Insertion-A Parameter3 LSB	~	00 00	
		09	2	00 - 7F 00 - 7F	Insertion-A Parameter4 MSB Insertion-A Parameter4 LSB	~	00 00	
		0B	2	00 - 7F 00 - 7F	Insertion-A Parameter5 MSB Insertion-A Parameter5 LSB	~	00 00	
		0D	2	00 - 7F 00 - 7F	Insertion-A Parameter6 MSB Insertion-A Parameter6 LSB	~	00 00	
		0F	2	00 - 7F 00 - 7F	Insertion-A Parameter7 MSB Insertion-A Parameter7 LSB	~	00 00	
		11	2	00 - 7F 00 - 7F	Insertion-A Parameter8 MSB Insertion-A Parameter8 LSB	~	00 00	
		13	2	00 - 7F 00 - 7F	Insertion-A Parameter9 MSB Insertion-A Parameter9 LSB	~	00 00	
		15	2	00 - 7F 00 - 7F	Insertion-A Parameter 10 MSB Insertion-A Parameter 10 LSB	~	00 00	
		17	2	00 - 7F 00 - 7F	Insertion-A Parameter 11 MSB Insertion-A Parameter 11 LSB	~	00 00	
		19	2	00 - 7F 00 - 7F	Insertion-A Parameter 12 MSB Insertion-A Parameter 12 LSB	~	00 00	
		1B	2	00 - 7F 00 - 7F	Insertion-A Parameter 13 MSB Insertion-A Parameter 13 LSB	~	00 00	
		1D	2	00 - 7F 00 - 7F	Insertion-A Parameter 14 MSB Insertion-A Parameter 14 LSB	~	00 00	
		1F	2	00 - 7F 00 - 7F	Insertion-A Parameter 15 MSB Insertion-A Parameter 15 LSB	~	00 00	
		21	2	00 - 7F 00 - 7F	Insertion-A Parameter 16 MSB Insertion-A Parameter 16 LSB	~	00 00	
		23	2	00 - 7F 00 - 7F	Insertion-A Parameter 17 MSB Insertion-A Parameter 17 LSB	~	00 00	
		25	2	00 - 7F 00 - 7F	Insertion-A Parameter 18 MSB Insertion-A Parameter 18 LSB	~	00 00	
		27	2	00 - 7F 00 - 7F	Insertion-A Parameter 19 MSB Insertion-A Parameter 19 LSB	~	00 00	
		29	2	00 - 7F 00 - 7F	Insertion-A Parameter 20 MSB Insertion-A Parameter 20 LSB	~	00 00	
		2B	2	00 - 7F 00 - 7F	Insertion-A Parameter 21 MSB Insertion-A Parameter 21 LSB	~	00 00	
		2D	2	00 - 7F 00 - 7F	Insertion-A Parameter 22 MSB Insertion-A Parameter 22 LSB	~	00 00	
		2F	2	00 - 7F 00 - 7F	Insertion-A Parameter 23 MSB Insertion-A Parameter 23 LSB	~	00 00	
		31	2	00 - 7F 00 - 7F	Insertion-A Parameter 24 MSB Insertion-A Parameter 24 LSB	~	00 00	
		33	2		reserved		00 00	
		35	2		reserved		00 00	
		37	2		reserved		00 00	
		39	2		reserved		00 00	
		3B	2		reserved		00 00	
		3D	2		reserved		00 00	
		3F	2		reserved		00 00	
		41	2		reserved		00 00	
		43	1	00 - 0A, 10, 11, 7F	Side Chain Part	0:part1, ..., 10:part11, 16:A/D, 17:Master, 127: Off	7F	

TOTAL SIZE = 68 44 (HEX)

p = Part number

00 - 0A Part 1 - 11(Drum, Synth, DX, SAMPLER)

## Insertion B

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
31	3p	00	2	0D 2F	Insertion-B Type MSB Insertion-B Type LSB	Refer to Effect Parameter List	0D 2F	LP-HP FILTER
		02	1	00 - 7F	Insertion-B Template Number	..	00	
		03	2	00 - 7F 00 - 7F	Insertion-B Parameter 1 MSB Insertion-B Parameter 1 LSB	..	02 00	
		05	2	00 - 7F 00 - 7F	Insertion-B Parameter 2 MSB Insertion-B Parameter 2 LSB	..	00 10	
		07	2	00 - 7F 00 - 7F	Insertion-B Parameter 3 MSB Insertion-B Parameter 3 LSB	..	00 00	
		09	2	00 - 7F 00 - 7F	Insertion-B Parameter 4 MSB Insertion-B Parameter 4 LSB	..	00 00	
		0B	2	00 - 7F 00 - 7F	Insertion-B Parameter 5 MSB Insertion-B Parameter 5 LSB	..	00 00	
		0D	2	00 - 7F 00 - 7F	Insertion-B Parameter 6 MSB Insertion-B Parameter 6 LSB	..	00 00	
		0F	2	00 - 7F 00 - 7F	Insertion-B Parameter 7 MSB Insertion-B Parameter 7 LSB	..	00 00	
		11	2	00 - 7F 00 - 7F	Insertion-B Parameter 8 MSB Insertion-B Parameter 8 LSB	..	00 00	
		13	2	00 - 7F 00 - 7F	Insertion-B Parameter 9 MSB Insertion-B Parameter 9 LSB	..	00 00	
		15	2	00 - 7F 00 - 7F	Insertion-B Parameter 10 MSB Insertion-B Parameter 10 LSB	..	00 00	
		17	2	00 - 7F 00 - 7F	Insertion-B Parameter 11 MSB Insertion-B Parameter 11 LSB	..	00 00	
		19	2	00 - 7F 00 - 7F	Insertion-B Parameter 12 MSB Insertion-B Parameter 12 LSB	..	00 00	
		1B	2	00 - 7F 00 - 7F	Insertion-B Parameter 13 MSB Insertion-B Parameter 13 LSB	..	00 00	
		1D	2	00 - 7F 00 - 7F	Insertion-B Parameter 14 MSB Insertion-B Parameter 14 LSB	..	00 00	
		1F	2	00 - 7F 00 - 7F	Insertion-B Parameter 15 MSB Insertion-B Parameter 15 LSB	..	00 00	
		21	2	00 - 7F 00 - 7F	Insertion-B Parameter 16 MSB Insertion-B Parameter 16 LSB	..	00 00	
		23	2	00 - 7F 00 - 7F	Insertion-B Parameter 17 MSB Insertion-B Parameter 17 LSB	..	00 00	
		25	2	00 - 7F 00 - 7F	Insertion-B Parameter 18 MSB Insertion-B Parameter 18 LSB	..	00 00	
		27	2	00 - 7F 00 - 7F	Insertion-B Parameter 19 MSB Insertion-B Parameter 19 LSB	..	00 00	
		29	2	00 - 7F 00 - 7F	Insertion-B Parameter 20 MSB Insertion-B Parameter 20 LSB	..	00 00	
		2B	2	00 - 7F 00 - 7F	Insertion-B Parameter 21 MSB Insertion-B Parameter 21 LSB	..	00 00	
		2D	2	00 - 7F 00 - 7F	Insertion-B Parameter 22 MSB Insertion-B Parameter 22 LSB	..	00 00	
		2F	2	00 - 7F 00 - 7F	Insertion-B Parameter 23 MSB Insertion-B Parameter 23 LSB	..	00 00	
		31	2	00 - 7F 00 - 7F	Insertion-B Parameter 24 MSB Insertion-B Parameter 24 LSB	..	00 00	
		33	2		reserved		00 00	
		35	2		reserved		00 00	
		37	2		reserved		00 00	
		39	2		reserved		00 00	
		3B	2		reserved		00 00	
		3D	2		reserved		00 00	
		3F	2		reserved		00 00	
		41	2		reserved		00 00	
		43	1		reserved		00	

TOTAL SIZE = 68 44 (HEX)

p = Part number

00 - 0A Part 1 - 11(Drum, Synth, DX, SAMPLER)

## LFO

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
31	4p	00	1	00 - 05	LFO Phase	0, 90, 120, 180, 240, 270	00	
		01	1	00 - 0C	LFO Wave	Triangle, Triangle+, Saw Up, Saw Down, Squ1/4, Squ1/3, Square, Squ2/3, Squ3/4, Trapezoid, S/H1, S/H2, User	00	
		02	1	00 - 3F	LFO Speed	0 - 63	20	Available when Tempo Sync is Off
		03	1	05 - 18	LFO Tempo Speed	5 - 24 (16th, 8th/3, 16th., 8th, 4th/3, 8th., 4th, 2th/3, 4th., 2nd, Whole/3, 2nd., 4thX4, 4thX5, 4thX6, 4thX7, 4thX8, 4thX16, 4thX32, 4thX64)	0B	Available when Tempo Sync is On
		04	1	00 - 01	LFO Tempo Sync	Off, On	00	Default value for Drum track is 00 (Off)
		05	1	00 - 7F	LFO Delay Time	0 - 127	00	
		06	1	00 - 7F	LFO Fade In Time	0 - 127	00	
		07	1	00 - 7F	LFO Hold Time	0 - 126, Hold	7F	
		08	1	00 - 7F	LFO Fade Out Time	0 - 127	40	
		09	1	00 - 02	LFO Key On Reset	Off, Each-On, 1st-On	02	Default value for Drum track is 00 (Off)
		0A	1	00 - 01	LFO Play Mode	Loop, One-shot	00	
		0B	1	00 - 44	LFO Box1 Destination	0 - 68	40	
		0C	1	00 - 7F	LFO Box1 Depth	0 - 127	00	
		0D	1		reserved		0F	
		0E	1	00 - 45	LFO Box2 Destination	0 - 68	41	
		0F	1	00 - 7F	LFO Box2 Depth	0 - 127	00	
		10	1		reserved		0F	
		11	1	00 - 45	LFO Box3 Destination	0 - 68	42	
		12	1	00 - 7F	LFO Box3 Depth	0 - 127	00	
		13	1		reserved		0F	
		14	1	00 - 06	User Wave Total Step	2 steps, 3 steps, 4 steps, 6 steps, 8 steps, 12 steps, 16 steps	06	
		15	1	00 - 03	User Wave Slope	Off, Up, Down, Up&Down	00	
		16	1	00 - 7F	User Wave Step Value 1	-64 - +63	40	
		17	1	00 - 7F	User Wave Step Value 2	-64 - +63	40	
		18	1	00 - 7F	User Wave Step Value 3	-64 - +63	40	
		19	1	00 - 7F	User Wave Step Value 4	-64 - +63	40	
		1A	1	00 - 7F	User Wave Step Value 5	-64 - +63	40	
		1B	1	00 - 7F	User Wave Step Value 6	-64 - +63	40	
		1C	1	00 - 7F	User Wave Step Value 7	-64 - +63	40	
		1D	1	00 - 7F	User Wave Step Value 8	-64 - +63	40	
		1E	1	00 - 7F	User Wave Step Value 9	-64 - +63	40	
		1F	1	00 - 7F	User Wave Step Value 10	-64 - +63	40	
		20	1	00 - 7F	User Wave Step Value 11	-64 - +63	40	
		21	1	00 - 7F	User Wave Step Value 12	-64 - +63	40	
		22	1	00 - 7F	User Wave Step Value 13	-64 - +63	40	
		23	1	00 - 7F	User Wave Step Value 14	-64 - +63	40	
		24	1	00 - 7F	User Wave Step Value 15	-64 - +63	40	
		25	1	00 - 7F	User Wave Step Value 16	-64 - +63	40	
		26	1	00 - 7F	LFO Random Speed Depth	0 - 127	00	Available when Tempo Sync is Off

TOTAL SIZE = 39 27 (HEX)

p = Part number

00 - 08, 0A Part 1 - 9, 11(Drum, Synth, SAMPLER)

## Arpeggiator

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
31	5p	00	1	00 - 0F	ARP Template	Off, Up, Up 2Oct, Down, Down 2Oct, Random, Random 2Oct, Up/Down A, Up/Down A 2Oct, Up/Down B, Up/Down B 2Oct, Thumb Up, Unison, Chord Trigger1, Chord Trigger2, As Played	00	Affects ARP Switch / Key Mode / Octave Range / Type
		01	1	00 - 01	ARP Switch	Off, On	00	
		02	1		reserved		00	
		03	1		reserved		00	
		04	1		reserved		00	
		05	1		reserved		00	
		06	1	00 - 01	ARP Loop	Off, On	01	
		07	1	00 - 02	ARP Hold	Sync-Off, Off, On	01	
		08	1	00 - 09	ARP Unit Multiply	50%, 66%, 75%, 100%, 133%, 150%, 200%, 266%, 300%, 400%	03	
		09	1	00 - 7F	ARP Note Limit Low	C-2 ... G8	00	
		0A	1	00 - 7F	ARP Note Limit High	C-2 ... G8	7F	
		0B	1	01 - 7F	ARP Velocity Limit Low	1 - 127	01	
		0C	1	01 - 7F	ARP Velocity Limit High	1 - 127	7F	
		0D	1	00 - 04	ARP Key Mode	Sort, Thru, Direct, Sort+Drct, Thru+Drct	00	
		0E	1	00 - 01	ARP Vel Mode	Original, Thru	01	
		0F	1		reserved		00	
		10	1	03	ARP Quantize Value	120	03	
		11	1	00 - 64	ARP Quantize Strength	0 - 100[%]	00	
		12	2	00 - 01 00 - 7F	ARP Velocity Rate MSB ARP Velocity Rate LSB	0 - 200[%] 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	00 64	
		14	2	00 - 01 00 - 7F	ARP Gate Time Rate MSB ARP Gate Time Rate LSB	0 - 200[%] 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	00 64	
		16	2	00 - 01 00 - 7F	Swing Offset MSB Swing Offset LSB	-60 - 0 - +60 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	01 00	
		18	1		reserved		00	
		19	1		reserved		00	
		1A	1		reserved		00	
		1B	1		reserved		00	
		1C	1	3D - 43	ARP Octave Range	-3 - 0 - +3	40	
		1D	1		Reserved		00	
		1E	2	00 - 00 00 - 08	ARP Type MSB ARP Type LSB	Up, Down, Random, Up Down 1, Up Down 2, Slap & Pop, Unison, Rhythm 1, Rhythm 2 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	00 00	

TOTAL SIZE = 32 20 (HEX)

p = Part number

07 - 09 Part 8 - 10(Synth, DX)




## Sound Drum / Synth / SAMPLER (AWM Sound Element)

Oscillator / Amplitude / Pitch

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
41	ep	00	1	00 - 01	Element Assign	Off, On	01	Init value for Element 2 - 8 is Off
		01	1	00 - 01	Wave Select	0=Preset, 1=User	00	SAMPLER track is fixed to 1 (User)
		02	1	00 - 07	Element Group Number	1 - 8	00	
		03	2	00 - 1F 00 - 7F	Wave Number MSB Wave Number LSB	1 - 4096 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	00 01	User Wave : 1 - 2048
		05	1		reserved		00	
		06	1		reserved		00	
		07	1		reserved		00	
		08	1	00 - 01	Trigger/Gate Mode	Trigger, Gate	00	Init value for Synth/ SAMPLER track is 1
		09	1		reserved		01	
		0A	1	00 - 7F	Alternate Group	0=off, 1 - 127	00	
		0B	1	01 - 7F	Pan	L63 ... C ... R63	40	
		0C	1	00 - 7F	Random Pan Depth	0 - 127	00	
		0D	1	00 - 7F	Alternate Pan Depth	L64 ... C ... R63	40	
		0E	1	00 - 7F	Scaling Pan Depth	-64 - +63	40	
		0F	1	00 - 07	XA Control	Normal, Legato, Key Off, Cycle, Random	00	
		10	1	00 - 7F	Note Limit Low	C-2 ... G8	00	
		11	1	00 - 7F	Note Limit High	C-2 ... G8	7F	
		12	1	01 - 7F	Velocity Limit Low	1 - 127	01	
		13	1	01 - 7F	Velocity Limit High	1 - 127	7F	
		14	1	00 - 7F	Velocity Cross Fade	0 - 127	00	
		15	1	00 - 7F	Key On Delay	0 - 127	00	Available when Tempo Sync is Off
		16	1	00 - 01	Key On Delay Tempo Sync	Off, On	00	
		17	1		reserved		00	
		18	1	00 - 02	Insertion Effect Switch	Thru, InsA, InsB	01	
		19	1	00	Output Select	0=MainL&R	00	
		1A	1		reserved		00	
		1B	5		reserved		00 00 00 00 00	
		20	5		reserved		00 00 00 00 00	
		25	1		reserved		00	
		26	1	00 - 01	LFO Speed Range	Normal, Extended	00	
		27	2	00 - 03 00 - 7F	LFO Extended Speed	0 - 415 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	00 00	Available when LFO Speed Range is Extended
		29	1		reserved		00	
		2A	1	00 - 07	LFO Box Switch	bit6-3: reserved bit2: off,on box3 bit1: off,on box2 bit0: off,on box1	07	
		2B	1	05 - 15	Key On Delay Tempo	16th, 8th/3, 16th., 8th, 4th/3, 8th., 4th, 2th/3, 4th., 2nd, Whole/3, 2nd., 4thX4, 4thX5, 4thX6, 4thX7, 4thX8	0B	Available when Tempo Sync is On
		2C	1	00 - 01	Half Damper Switch	Off, On	00	
		2D	1		Reserved		00	
		2E	1	00 - 7F	Element Level	0 - 127	64	
		2F	1	00 - 7F	Level Velocity Sensitivity	-64 - +63	54	
		30	1	00 - 7F	Level Velocity Offset	0 - 127	00	
		31	1	00 - 04	Level Sens Key Curve	00 - 04 	03	
		32	1		reserved		00	
		33	1	00 - 7F	AEG Attack Time	0 - 127	00	
		34	1	00 - 7F	AEG Decay 1 Time	0 - 127	40	
		35	1	00 - 7F	AEG Decay 2 Time	0 - 127	40	
		36	1	00 - 7F	Half Damper Time	0 - 127	7F	
		37	1	00 - 7F	AEG Release Time	0 - 127	14	
		38	1	00 - 7F	AEG Init Level	0 - 127	00	
		39	1	00 - 7F	AEG Attack Level	0 - 127	7F	
		3A	1	00 - 7F	AEG Decay 1 Level	0 - 127	7F	
		3B	1	00 - 7F	AEG Decay 2 Level	0 - 127	7F	
		3C	1		reserved		00	
		3D	1	00 - 04	AEG Time Velocity Segment	Attack, Atk+Dcy, Decay, Atk+Ris, All	04	
		3E	1	00 - 7F	AEG Time Velocity Sensitivity	-64 - +63	40	
		3F	1	00 - 7F	AEG Time Key Follow Sensitivity	-64 - +63	40	

# MIDI Data Table

Address	size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
40	1	00 - 7F	AEG Time Key Follow Center Note	C-2 ... G8	18	
41	1	00 - 7C	Level Scaling Break Point 1	C-2 ... E8	24	BP1<BP2 <BP3<BP4
42	1	01 - 7D	Level Scaling Break Point 2	C#-2 ... F8	30	BP1<BP2 <BP3<BP4
43	1	02 - 7E	Level Scaling Break Point 3	D-2 ... F#8	3C	BP1<BP2 <BP3<BP4
44	1	03 - 7F	Level Scaling Break Point 4	D#-2 ... G8	48	BP1<BP2 <BP3<BP4
45	2	00 - 01 00 - 7F	Level Scaling Offset 1 MSB Level Scaling Offset 1 LSB	-128 - +127 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	01 00	
47	2	00 - 01 00 - 7F	Level Scaling Offset 2 MSB Level Scaling Offset 2 LSB	..	01 00	
49	2	00 - 01 00 - 7F	Level Scaling Offset 3 MSB Level Scaling Offset 3 LSB	..	01 00	
4B	2	00 - 01 00 - 7F	Level Scaling Offset 4 MSB Level Scaling Offset 4 LSB	..	01 00	
4D	1	00 - 7F	Level Key Follow Sensitivity	-64 - +63	40	
4E	1	00 - 7F	AEG Time Key Follow Sensitivity Release Adjustment	0 - 127	40	
4F	1	28 - 58	Coarse Tune	-24 - +24	40	
50	1	00 - 7F	Fine Tune	-64 - +63	40	
51	1	00 - 7F	Pitch Velocity Sensitivity	-64 - +63	40	
52	1		reserved		00	
53	1	00 - 7F	Random Pitch Depth	0 - 127	00	
54	1	00 - 7F	Pitch Key Follow Sensitivity	-200 - +200[%]	60	
55	1	00 - 7F	Pitch Key Follow Sensitivity Center Note	C-2 ... G8	3C	
56	1	00 - 7F	Pitch Fine Scaling Sensitivity	-64 - +63	40	
57	1	00 - 7F	PEG Hold Time	0 - 127	00	
58	1	00 - 7F	PEG Attack Time	0 - 127	28	
59	1	00 - 7F	PEG Decay 1 Time	0 - 127	40	
5A	1	00 - 7F	PEG Decay 2 Time	0 - 127	40	
5B	1	00 - 7F	PEG Release Time	0 - 127	40	
5C	2	00 - 01 00 - 7F	PEG Hold Level MSB PEG Hold Level LSB	-128 - +127 (-4800 - +4800[cent]) 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	01 00	
5E	2	00 - 01 00 - 7F	PEG Attack Level MSB PEG Attack Level LSB	..	01 00	
60	2	00 - 01 00 - 7F	PEG Decay 1 Level MSB PEG Decay 1 Level LSB	..	01 00	
62	2	00 - 01 00 - 7F	PEG Decay 2 Level MSB PEG Decay 2 Level LSB	..	01 00	
64	2	00 - 01 00 - 7F	PEG Release Level MSB PEG Release Level LSB	..	01 00	
66	1	00 - 7F	PEG Depth	-64 - +63	54	
67	1	00 - 04	PEG Time Velocity Sensitivity Segment	Attack, Atk+Dcy, Decay, Atk+Ris, All	04	
68	1	00 - 7F	PEG Time Velocity Sensitivity	-64 - +63	40	
69	1	00 - 7F	PEG Depth Velocity Sensitivity	-64 - +63	40	
6A	1	00 - 04	PEG Depth Velocity Sensitivity Curve	0 - 4 	02	
6B	1	00 - 7F	PEG Time Key Follow Sensitivity	-64 - +63	40	
6C	1	00 - 7F	PEG Time Key Follow Sensitivity Center Note	C-2 ... G8	3C	

TOTAL SIZE = 109 6D (HEX)

p = Part number

0 - 8, A Part 1 - 9, 11(Drum, Synth, SAMPLER)

e = Element number

0 - 7 Element 1 - 8 (Normal)

## Filter / EQ / LFO

Address				size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
42	ep	00	1	00 - 15	Filter Type	LPF24D, LPF24A, LPF18, LPF18s, LPF12+HPF12, LPF6+HPF12, HPF24D, HPF12, BPF12D, (reserved), BPFw, BPF6, BEF12, BEF6, DualLPF, DualHPF, DualBPF, DualBEF, (reserved), LPF12+BPF6, (reserved), Thru	04		
		01	2	00 - 01 00 - 7F	Filter Cutoff Frequency MSB Filter Cutoff Frequency LSB	0 - 255 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	01 20		
		03	1	00 - 7F	Filter Cutoff Velocity Sensitivity	-64 - +63	40		
		04	1		reserved		02		
		05	1	00 - 7F	Filter Resonance/Width	0 - 127	00	Not available when Filter Type is LPF6/Thru	
		06	1	00 - 7F	Filter Resonance Velocity Sensitivity	-64 - +63	40		
		07	2	00 - 01 00 - 7F	HPF Cutoff Frequency MSB HPF Cutoff Frequency LSB	0 - 255 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	00 00		
		09	1		reserved		40		
		0A	2	00 - 01 00 - 7F	Distance MSB Distance LSB	-128 - +127 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	01 00	Available when Filter Type is DualLPF/HPF/BPF/BEF	
		0C	2	00 - 01 00 - 7F	Filter Gain MSB Filter Gain LSB	0 - 255 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	01 66		
		0E	1	00 - 7F	FEG Hold Time	0 - 127	00		
		0F	1	00 - 7F	FEG Attack Time	0 - 127	00		
		10	1	00 - 7F	FEG Decay 1 Time	0 - 127	40		
		11	1	00 - 7F	FEG Decay 2 Time	0 - 127	40		
		12	1	00 - 7F	FEG Release Time	0 - 127	50		
		13	2	00 - 01 00 - 7F	FEG Hold Level MSB FEG Hold Level LSB	-128 - +127 (-9600 - +9600[cent]) 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	01 00		
		15	2	00 - 01 00 - 7F	FEG Attack Level MSB FEG Attack Level LSB	..	01 7F		
		17	2	00 - 01 00 - 7F	FEG Decay 1 Level MSB FEG Decay 1 Level LSB	..	01 7F		
		19	2	00 - 01 00 - 7F	FEG Decay 2 Level MSB FEG Decay 2 Level LSB	..	01 7F		
		1B	2	00 - 01 00 - 7F	FEG Release Level MSB FEG Release Level LSB	..	01 00		
		1D	1	00 - 7F	FEG Depth	-64 - +63	68		
		1E	1	00 - 04	FEG Time Velocity Sensitivity Segment	Attack, Atk+Dcy, Decay, Atk+Rls, All	04		
		1F	1	00 - 7F	FEG Time Velocity Sensitivity	-64 - +63	40		
		20	1	00 - 7F	FEG Depth Velocity Sensitivity	-64 - +63	40		
		21	1	00 - 04	FEG Depth Velocity Sensitivity Curve	0 - 4 	02		
		22	1	00 - 7F	FEG Time Key Follow Sensitivity	-64 - +63	40		
		23	1	00 - 7F	FEG Time Key Follow Sensitivity Center Note	C-2 ... G8	18		
		24	1	00 - 7C	Filter Cutoff Scaling Break Point 1	C-2 ... E8	24	BP1<BP2 <BP3<BP4	
		25	1	01 - 7D	Filter Cutoff Scaling Break Point 2	C#-2 ... F8	30	BP1<BP2 <BP3<BP4	
		26	1	02 - 7E	Filter Cutoff Scaling Break Point 3	D-2 ... F#8	3C	BP1<BP2 <BP3<BP4	
		27	1	03 - 7F	Filter Cutoff Scaling Break Point 4	D#-2 ... G8	48	BP1<BP2 <BP3<BP4	
		28	2	00 - 01 00 - 7F	Filter Cutoff Scaling Offset 1 MSB Filter Cutoff Scaling Offset 1 LSB	-128 - +127 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	01 00		
		2A	2	00 - 01 00 - 7F	Filter Cutoff Scaling Offset 2 MSB Filter Cutoff Scaling Offset 2 LSB	..	01 00		
		2C	2	00 - 01 00 - 7F	Filter Cutoff Scaling Offset 3 MSB Filter Cutoff Scaling Offset 3 LSB	..	01 00		
		2E	2	00 - 01 00 - 7F	Filter Cutoff Scaling Offset 4 MSB Filter Cutoff Scaling Offset 4 LSB	..	01 00		
		30	1	00 - 7F	Filter Cutoff Key Follow Sensitivity	-200 - +200[%]	4A		
		31	1	00 - 7F	HPF Cutoff Key Follow Sensitivity	-200 - +200[%]	40		
		32	1	00 - 05	EQ Type	2-band, P.EQ, Boost6, Boost12, Boost18, Thru	00		
		33	1	00 - 1F	EQ Q	0 - 31 (0.7 - 10.3)	00	Available when EQ Type is P.EQ	
		34	2	00 - 01 00 - 7F	EQ 1 Frequency	50.1 - 2.00k (2 Band) 139.7 - 12.9k (P.EQ) 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	00 36	Available when EQ Type is 2-band/P.EQ	
		36	1	20 - 60	EQ 1 Gain	-32 - +32 (-12.00 - +12.00[dB])	40		
		37	2	01 03 - 71	EQ 2 Frequency	503.8 - 10.1k 1st bit6-0 → bit13-7, 2nd bit6-0 → bit6-0	01 67	Available when EQ Type is 2-band	
		39	1	20 - 60	EQ 2 Gain	-32 - +32 (-12.00 - +12.00[dB])	40		
		3A	1	00 - 02	LFO Wave	Saw, Triangle, Square	01		

## MIDI Data Table

Address	size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
	3B	1	00 - 01	LFO Key On Sync	Off, On	01
	3C	1	00 - 7F	LFO Key On Delay Time	0 - 127	00
	3D	1	00 - 3F	LFO Speed	0 - 63	26
	3E	1	00 - 7F	LFO AMod Depth	0 - 127	00
	3F	1	00 - 7F	LFO PMod Depth	0 - 127	00
	40	1	00 - 7F	LFO FMod Depth	0 - 127	00
	41	1	00 - 7F	LFO Fade In Time	0 - 127	00
	42	1		reserved		00
	43	1	00 - 05	Common LFO Phase Offset	+0, +90, +120, +180, +240, +270	00
	44	1	00 - 7F	Common LFO Box1 Depth Ratio	0 - 127	7F
	45	1	00 - 7F	Common LFO Box2 Depth Ratio	0 - 127	7F
	46	1	00 - 7F	Common LFO Box3 Depth Ratio	0 - 127	7F

TOTAL SIZE = 71 47 (HEX)

p = Part number

0 - 8, A Part 1 - 9, 11(Drum, Synth, SAMPLER)

e = Element number

0 - 7 Element 1 - 8 (Normal)

## Sound DX (FM Sound Operator)

## Common

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
48	09	00	1	00 - 0B	Algorithm	1 - 12	00	
		01	1		reserved		00	
		02	1	28 - 58	Pitch Bend Sensitivity	-24 - 0 - +24 [semitones]	42	
		03	1		reserved		00	
		04	1	00 - 06	LFO Wave	0:Sin, 1:Tri, 2:Saw-Up, 3:Saw-Down, 4:Square, 5:S&H8, 6:S&H	00	
		05	1	00 - 7F	LFO Speed	0 - 127	40	
		06	1	00 - 7F	LFO Delay	0 - 127	00	
		07	1	00 - 7F	LFO PMD	0 - 127	00	
		08	1		reserved		00	
		09	1		reserved		00	
		0A	1	00 - 7F	PEG Rate 1	0 - 127	40	
		0B	1	00 - 7F	PEG Rate 2	0 - 127	40	
		0C	1	00 - 7F	PEG Rate 3	0 - 127	40	
		0D	1	00 - 7F	PEG Rate 4	0 - 127	40	
		0E	1	10 - 70	PEG Level 1	-48 - 0 - 48 (16 - 64 - 112) +/- 4Oct	40	
		0F	1	10 - 70	PEG Level 2	-48 - 0 - 48 (16 - 64 - 112) +/- 4Oct	40	
		10	1	10 - 70	PEG Level 3	-48 - 0 - 48 (16 - 64 - 112) +/- 4Oct	40	
		11	1	10 - 70	PEG Level 4	-48 - 0 - 48 (16 - 64 - 112) +/- 4Oct	40	
		12	1		reserved		00	
		13	1		reserved		00	
		14	1		reserved		00	
		15	1		reserved		00	
		16	1		reserved		00	
		17	1		reserved		00	

TOTAL SIZE = 24 18 (HEX)

## Operator

Address			size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
49	o9	00	1	00 - 01	ON/OFF	Off, On	01	
		01	1		reserved		00	
		02	1	00 - 7F	EG Rate 1		7F	
		03	1	00 - 7F	EG Rate 2		7F	
		04	1	00 - 7F	EG Rate 3		7F	
		05	1	00 - 7F	EG Rate 4		64	
		06	1	00 - 7F	EG Level 1		7F	
		07	1	00 - 7F	EG Level 2		7F	
		08	1	00 - 7F	EG Level 3		7F	
		09	1	00 - 7F	EG Level 4		00	
		0A	1	00 - 7F	EG Keyboard Rate Scaling		00	
		0B	1		reserved		00	
		0C	1	00 - 7F	Keyboard Level Scaling Left Depth		00	
		0D	1	00 - 7F	Keyboard Level Scaling Right Depth		00	
		0E	1	00 - 03	Keyboard Level Scaling Left Curve	0: -LIN, 1: -EXP, 2: +EXP, 3: +LIN	00	
		0F	1	00 - 03	Keyboard Level Scaling Right Curve	0: -LIN, 1: -EXP, 2: +EXP, 3: +LIN	03	
		10	1		reserved		00	
		11	1	00 - 7F	LFO AMD Depth		00	
		12	1	00 - 7F	Level Velocity Sensitivity		00	
		13	1	00 - 7F	Level Output Level		64	Init value for Operator2/3 is 0
		14	1	00 - 7F	Level Feedback Level		00	
		15	1	00 - 01	Level Feedback Type	0:SAW, 1:SQUARE	00	
		16	1		reserved		00	
		17	1	00 - 01	LFO PMD ON/OFF	Off, On	01	
		18	1	00 - 01	PEG ON/OFF	Off, On	01	
		19	1	00 - 01	Freq. Mode	0:RATIO, 1:FIXED	00	
		1A	1	00 - 1F	Freq. Coarse		01	
		1B	1	00 - 63	Freq. Fine		00	
		1C	1	00 - 7F	Freq. Detune	-64 - 0 - +63 (0 - 64 - 127)	40	
		1D	1		reserved		00	
		1E	1		reserved		00	
		1F	1		reserved		00	

TOTAL SIZE = 32 20 (HEX)

o = Operator number

0 - 3 Operator 1 - 4

## SAMPLER Sample

## General

Address		size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
50	eA	00	1	00 - 7F	Sample Name 1	00	UTF8 (7-bit encoded)
		01	1	00 - 7F	Sample Name 2	00	..
		02	1	00 - 7F	Sample Name 3	00	..
		03	1	00 - 7F	Sample Name 4	00	..
		04	1	00 - 7F	Sample Name 5	00	..
		05	1	00 - 7F	Sample Name 6	00	..
		06	1	00 - 7F	Sample Name 7	00	..
		07	1	00 - 7F	Sample Name 8	00	..
		08	1	00 - 7F	Sample Name 9	00	..
		09	1	00 - 7F	Sample Name 10	00	..
		0A	1	00 - 7F	Sample Name 11	00	..
		0B	1	00 - 7F	Sample Name 12	00	..
		0C	1	00 - 7F	Sample Name 13	00	..
		0D	1	00 - 7F	Sample Name 14	00	..
		0E	1	00 - 7F	Sample Name 15	00	..
		0F	1	00 - 7F	Sample Name 16	00	..
		10	1	00 - 7F	Sample Name 17	00	..
		11	1	00 - 7F	Sample Name 18	00	..
		12	1	00 - 7F	Sample Name 19	00	..
		13	1	00 - 7F	Sample Name 20	00	..
		14	1	00 - 7F	Sample Name 21	00	..
		15	1	00 - 7F	Sample Name 22	00	..
		16	1	00 - 7F	Sample Name 23	00	..
		17	1	00 - 7F	Sample Name 24	00	..
		18	1	00 - 7F	Sample Name 25	00	..
		19	1	00 - 7F	Sample Name 26	00	..
		1A	1	00 - 7F	Sample Name 27	00	..
		1B	1	00 - 7F	Sample Name 28	00	..
		1C	1	00 - 7F	Sample Name 29	00	..
		1D	1	00 - 7F	Sample Name 30	00	..
		1E	1	00 - 7F	Sample Name 31	00	..
		1F	1	00 - 7F	Sample Name 32	00	..
		20	1	00 - 7F	Sample Name 33	00	..
		21	1	00 - 7F	Sample Name 34	00	..
		22	1	00 - 7F	Sample Name 35	00	..
		23	1	00 - 7F	Sample Name 36	00	..
		24	1	00 - 7F	Sample Name 37	00	..
		25	1	00 - 7F	Sample Name 38	00	..
		26	1	00 - 7F	Sample Name 39	00	..
		27	1	00 - 7F	Sample Name 40	00	..
		28	1	00 - 7F	Sample Name 41	00	..
		29	1	00 - 7F	Sample Name 42	00	..
		2A	1	00 - 7F	Sample Name 43	00	..
		2B	1	00 - 7F	Sample Name 44	00	..
		2C	1	00 - 7F	Sample Name 45	00	..
		2D	1	00 - 7F	Sample Name 46	00	..
		2E	1	00 - 7F	Sample Name 47	00	..
		2F	1	00 - 7F	Sample Name 48	00	..
		30	1	00 - 7F	Sample Name 49	00	..
		31	1	00 - 7F	Sample Name 50	00	..
		32	1	00 - 7F	Sample Name 51	00	..
		33	1	00 - 7F	Sample Name 52	00	..
		34	1	00 - 7F	Sample Name 53	00	..
		35	1	00 - 7F	Sample Name 54	00	..
		36	1	00 - 7F	Sample Name 55	00	..
		37	1	00 - 7F	Sample Name 56	00	..
		38	1	00 - 7F	Sample Name 57	00	..
		39	1	00 - 7F	Sample Name 58	00	..
		3A	1	00 - 7F	Sample Name 59	00	..
		3B	1	00 - 7F	Sample Name 60	00	..
		3C	1	00 - 7F	Sample Name 61	00	..
		3D	1	00 - 7F	Sample Name 62	00	..
		3E	1	00 - 7F	Sample Name 63	00	..
		3F	1	00 - 7F	Sample Name 64	00	..
		40	1	00 - 7F	Sample Name 65	00	..
		41	1	00 - 7F	Sample Name 66	00	..

# MIDI Data Table

Address		size	Range (HEX)	Parameter Name	Description	Default (HEX)	Notes
	42	1	00 - 7F	Sample Name 67		00	UTF8 (7-bit encoded)
	43	1	00 - 7F	Sample Name 68		00	..
	44	1	00 - 7F	Sample Name 69		00	..
	45	1	00 - 7F	Sample Name 70		00	..
	46	1	00 - 7F	Sample Name 71		00	..
	47	1	00 - 7F	Sample Name 72		00	..
	48	1	00 - 7F	Sample Name 73		00	..
	49	1	00 - 7F	Sample Name 74		00	..
	4A	1	00 - 7F	Sample Name 75		00	..
	4B	1	00 - 7F	Sample Name 76		00	..
	4C	1	00 - 7F	Sample Name 77		00	..
	4D	1	00 - 7F	Sample Name 78		00	..
	4E	1	00 - 7F	Sample Name 79		00	..
	4F	1	00 - 7F	Sample Name 80		00	..
	50	1	00 - 7F	Sample Name 81		00	..
	51	1	00 - 7F	Sample Name 82		00	..
	52	1	00 - 7F	Sample Name 83		00	..
	53	1	00 - 7F	Sample Name 84		00	..
	54	1	00 - 7F	Sample Name 85		00	..
	55	1	00 - 7F	Sample Name 86		00	..
	56	1	00 - 7F	Sample Name 87		00	..
	57	1	00 - 7F	Sample Name 88		00	..
	58	1	00 - 7F	Sample Name 89		00	..
	59	1	00 - 7F	Sample Name 90		00	..
	5A	1	00 - 7F	Sample Name 91		00	..
	5B	1	00 - 7F	Sample Name 92		00	..
	5C	1	00 - 7F	Sample Name 93		00	..
	5D	1	00 - 7F	Sample Name 94		00	..
	5E	1	00 - 7F	Sample Name 95		00	..
	5F	1	00 - 7F	Sample Name 96		00	..
	60	1	00 - 7F	Sample Name 97		00	..
	61	1	00 - 7F	Sample Name 98		00	..
	62	1	00 - 7F	Sample Name 99		00	..
	63	1	00 - 7F	Sample Name 100		00	..
	64	1		reserved		00	
	65	1		reserved		00	
	66	4	00 00 00 00 - 07 7F 7F 7F	Start Point	0x00000000 - 0x00FFFFFF 1st bit2-0 → bit23-21, 2nd bit6-0 → bit20-14 3rd bit6-0 → bit13-7, 4th bit6-0 → bit6-0	00 00 00 00	
	6A	4	00 00 00 00, 00 00 00 00 - 07 7F 7F 7F	End Point	0x00000000, 0x0000000F - 0x00FFFFFF 1st bit2-0 → bit23-21, 2nd bit6-0 → bit20-14 3rd bit6-0 → bit13-7, 4th bit6-0 → bit6-0	00 00 00 00	bit3-0 is always on. "00 00 00 00" means empty.
	6E	1		reserved		00	
	6F	1		reserved		00	

TOTAL SIZE = 112 70 (HEX)

e = Element number

0 - 6 Element 1 - 7

## LFO Destination

No.	No. (HEX)	No. (BIN)	Parameter	Drum/Synth/ SAMPLER Part	DX Part
<b>Common Parameter</b>					
0	0000	00000000	Insertion Effect A Parameter 1	✓	✓
1	0001	00000001	Insertion Effect A Parameter 2	✓	✓
2	0002	00000010	Insertion Effect A Parameter 3	✓	✓
3	0003	00000011	Insertion Effect A Parameter 4	✓	✓
4	0004	00000100	Insertion Effect A Parameter 5	✓	✓
5	0005	00000101	Insertion Effect A Parameter 6	✓	✓
6	0006	00000110	Insertion Effect A Parameter 7	✓	✓
7	0007	00000111	Insertion Effect A Parameter 8	✓	✓
8	0008	00001000	Insertion Effect A Parameter 9	✓	✓
9	0009	00001001	Insertion Effect A Parameter 10	✓	✓
10	000A	00001010	Insertion Effect A Parameter 11	✓	✓
11	000B	00001011	Insertion Effect A Parameter 12	✓	✓
12	000C	00001100	Insertion Effect A Parameter 13	✓	✓
13	000D	00001101	Insertion Effect A Parameter 14	✓	✓
14	000E	00001110	Insertion Effect A Parameter 15	✓	✓
15	000F	00001111	Insertion Effect A Parameter 16	✓	✓
16	0010	00010000	Insertion Effect A Parameter 17	✓	✓
17	0011	00010001	Insertion Effect A Parameter 18	✓	✓
18	0012	00010010	Insertion Effect A Parameter 19	✓	✓
19	0013	00010011	Insertion Effect A Parameter 20	✓	✓
20	0014	00010100	Insertion Effect A Parameter 21	✓	✓
21	0015	00010101	Insertion Effect A Parameter 22	✓	✓
22	0016	00010110	Insertion Effect A Parameter 23	✓	✓
23	0017	00010111	Insertion Effect A Parameter 24	✓	✓
24	0018	00011000	reserved		
25	0019	00011001	reserved		
26	001A	00011010	reserved		
27	001B	00011011	reserved		
28	001C	00011100	reserved		
29	001D	00011101	reserved		
30	001E	00011110	reserved		
31	001F	00011111	reserved		
32	0020	00100000	Insertion Effect B Parameter 1	✓	✓
33	0021	00100001	Insertion Effect B Parameter 2	✓	✓
34	0022	00100010	Insertion Effect B Parameter 3	✓	✓
35	0023	00100011	Insertion Effect B Parameter 4	✓	✓
36	0024	00100100	Insertion Effect B Parameter 5	✓	✓
37	0025	00100101	Insertion Effect B Parameter 6	✓	✓
38	0026	00100110	Insertion Effect B Parameter 7	✓	✓
39	0027	00100111	Insertion Effect B Parameter 8	✓	✓
40	0028	00101000	Insertion Effect B Parameter 9	✓	✓
41	0029	00101001	Insertion Effect B Parameter 10	✓	✓
42	002A	00101010	Insertion Effect B Parameter 11	✓	✓
43	002B	00101011	Insertion Effect B Parameter 12	✓	✓
44	002C	00101100	Insertion Effect B Parameter 13	✓	✓
45	002D	00101101	Insertion Effect B Parameter 14	✓	✓
46	002E	00101110	Insertion Effect B Parameter 15	✓	✓
47	002F	00101111	Insertion Effect B Parameter 16	✓	✓
48	0030	00110000	Insertion Effect B Parameter 17	✓	✓
49	0031	00110001	Insertion Effect B Parameter 18	✓	✓
50	0032	00110010	Insertion Effect B Parameter 19	✓	✓
51	0033	00110011	Insertion Effect B Parameter 20	✓	✓
52	0034	00110100	Insertion Effect B Parameter 21	✓	✓
53	0035	00110101	Insertion Effect B Parameter 22	✓	✓
54	0036	00110110	Insertion Effect B Parameter 23	✓	✓
55	0037	00110111	Insertion Effect B Parameter 24	✓	✓
56	0038	00111000	reserved		
57	0039	00111001	reserved		
58	003A	00111010	reserved		
59	003B	00111011	reserved		
60	003C	00111100	reserved		
61	003D	00111101	reserved		
62	003E	00111110	reserved		
63	003F	00111111	reserved		



## MIDI Data Table

No.	No. (HEX)	No. (BIN)	Parameter	Drum/Synth/SAMPLER Part	DX Part
<b>Drum/Synth/SAMPLER Parameter</b>					
64	0040	01000000	Element Level	✓	
65	0041	01000001	Element Pitch	✓	
66	0042	01000010	Element Filter Cutoff	✓	
67	0043	01000011	Element Filter Resonance/Width	✓	
68	0044	01000100	Element Pan	✓	

**EQ Table**

Table 1 : 3bandEQ Frequency

DATA(DEC)	DATA1(HEX)	DATA2(HEX)	FREQ(Hz)
0	00	00	14.1
1	00	01	14.7
2	00	02	15.2
3	00	03	15.7
4	00	04	16.3
5	00	05	16.8
6	00	06	17.3
7	00	07	17.9
8	00	08	18.4
9	00	09	19.0
10	00	0A	19.5
11	00	0B	20.0
12	00	0C	20.6
13	00	0D	21.1
14	00	0E	21.6
15	00	0F	22.2
16	00	10	22.7
17	00	11	23.2
18	00	12	23.8
19	00	13	24.3
20	00	14	24.8
21	00	15	25.4
22	00	16	25.9
23	00	17	26.5
24	00	18	27.0
25	00	19	27.6
26	00	1A	28.7
27	00	1B	29.8
28	00	1C	30.8
29	00	1D	31.9
30	00	1E	33.0
31	00	1F	34.1
32	00	20	35.1
33	00	21	36.2
34	00	22	37.3
35	00	23	38.3
36	00	24	39.4
37	00	25	40.5
38	00	26	41.6
39	00	27	42.6
40	00	28	43.7
41	00	29	44.8
42	00	2A	45.8
43	00	2B	46.9
44	00	2C	48.0
45	00	2D	49.1
46	00	2E	50.1
47	00	2F	51.2
48	00	30	52.3
49	00	31	53.3
50	00	32	54.4
51	00	33	56.1
52	00	34	58.3
53	00	35	60.4
54	00	36	62.5
55	00	37	64.7
56	00	38	66.8
57	00	39	69.0
58	00	3A	71.1
59	00	3B	73.3
60	00	3C	75.4
61	00	3D	77.5
62	00	3E	79.7
63	00	3F	81.8
64	00	40	84.0

DATA(DEC)	DATA1(HEX)	DATA2(HEX)	FREQ(Hz)
65	00	41	86.1
66	00	42	88.2
67	00	43	90.4
68	00	44	92.5
69	00	45	94.7
70	00	46	96.8
71	00	47	99.0
72	00	48	101.1
73	00	49	103.2
74	00	4A	105.4
75	00	4B	107.5
76	00	4C	109.7
77	00	4D	114.0
78	00	4E	118.2
79	00	4F	122.5
80	00	50	126.8
81	00	51	131.1
82	00	52	135.4
83	00	53	139.7
84	00	54	143.9
85	00	55	148.2
86	00	56	152.5
87	00	57	156.8
88	00	58	161.1
89	00	59	165.4
90	00	5A	169.6
91	00	5B	173.9
92	00	5C	178.2
93	00	5D	182.5
94	00	5E	186.8
95	00	5F	191.1
96	00	60	195.3
97	00	61	199.6
98	00	62	203.9
99	00	63	208.2
100	00	64	212.5
101	00	65	216.8
102	00	66	222.8
103	00	67	231.3
104	00	68	239.9
105	00	69	248.5
106	00	6A	257.0
107	00	6B	265.6
108	00	6C	274.2
109	00	6D	282.7
110	00	6E	291.3
111	00	6F	299.9
112	00	70	308.4
113	00	71	317.0
114	00	72	325.6
115	00	73	334.1
116	00	74	342.7
117	00	75	351.3
118	00	76	359.8
119	00	77	368.4
120	00	78	377.0
121	00	79	385.5
122	00	7A	394.1
123	00	7B	402.7
124	00	7C	411.3
125	00	7D	419.8
126	00	7E	428.4
127	00	7F	437.0
128	01	00	452.4
129	01	01	469.5

# MIDI Data Table

DATA(DEC)	DATA1(HEX)	DATA2(HEX)	FREQ(Hz)
130	01	02	486.6
131	01	03	503.8
132	01	04	520.9
133	01	05	538.1
134	01	06	555.2
135	01	07	572.3
136	01	08	589.5
137	01	09	606.6
138	01	0A	623.7
139	01	0B	640.9
140	01	0C	658.0
141	01	0D	675.1
142	01	0E	692.3
143	01	0F	709.4
144	01	10	726.5
145	01	11	743.7
146	01	12	760.8
147	01	13	778.0
148	01	14	795.1
149	01	15	812.2
150	01	16	829.4
151	01	17	846.5
152	01	18	863.6
153	01	19	884.2
154	01	1A	918.5
155	01	1B	952.7
156	01	1C	987.0
157	01	1D	1,021.3
158	01	1E	1,055.5
159	01	1F	1,089.8
160	01	20	1,124.1
161	01	21	1,158.4
162	01	22	1,192.6
163	01	23	1,226.9
164	01	24	1,261.2
165	01	25	1,295.4
166	01	26	1,329.7
167	01	27	1,364.0
168	01	28	1,398.3
169	01	29	1,432.5
170	01	2A	1,466.8
171	01	2B	1,501.1
172	01	2C	1,535.3
173	01	2D	1,569.6
174	01	2E	1,603.9
175	01	2F	1,638.2
176	01	30	1,672.4
177	01	31	1,706.7
178	01	32	1,741.0
179	01	33	1,795.8
180	01	34	1,864.3
181	01	35	1,932.9
182	01	36	2,001.4
183	01	37	2,070.0
184	01	38	2,138.5
185	01	39	2,207.1
186	01	3A	2,275.6
187	01	3B	2,344.1
188	01	3C	2,412.7
189	01	3D	2,481.2
190	01	3E	2,549.8
191	01	3F	2,618.3
192	01	40	2,686.9
193	01	41	2,755.4
194	01	42	2,823.9
195	01	43	2,892.5
196	01	44	2,961.0
197	01	45	3,029.6
198	01	46	3,098.1

DATA(DEC)	DATA1(HEX)	DATA2(HEX)	FREQ(Hz)
199	01	47	3,166.6
200	01	48	3,235.2
201	01	49	3,303.7
202	01	4A	3,372.3
203	01	4B	3,440.8
204	01	4C	3,509.4
205	01	4D	3,646.4
206	01	4E	3,783.5
207	01	4F	3,920.6
208	01	50	4,057.7
209	01	51	4,194.8
210	01	52	4,331.9
211	01	53	4,468.9
212	01	54	4,606.0
213	01	55	4,743.1
214	01	56	4,880.2
215	01	57	5,017.3
216	01	58	5,154.4
217	01	59	5,291.5
218	01	5A	5,428.5
219	01	5B	5,565.6
220	01	5C	5,702.7
221	01	5D	5,839.8
222	01	5E	5,976.9
223	01	5F	6,114.0
224	01	60	6,251.0
225	01	61	6,388.1
226	01	62	6,525.2
227	01	63	6,662.3
228	01	64	6,799.4
229	01	65	6,936.5
230	01	66	7,128.4
231	01	67	7,402.6
232	01	68	7,676.7
233	01	69	7,950.9
234	01	6A	8,225.1
235	01	6B	8,499.2
236	01	6C	8,773.4
237	01	6D	9,047.6
238	01	6E	9,321.7
239	01	6F	9,595.9
240	01	70	9,870.1
241	01	71	10,144.2
242	01	72	10,418.4
243	01	73	10,692.6
244	01	74	10,966.7
245	01	75	11,240.9
246	01	76	11,515.1
247	01	77	11,789.3
248	01	78	12,063.4
249	01	79	12,337.6
250	01	7A	12,611.8
251	01	7B	12,885.9
252	01	7C	13,160.1
253	01	7D	13,434.3
254	01	7E	13,708.4
255	01	7F	13,982.6

Table 2 : 2bandEQ Frequency

MIDI(DEC)	DATA1(HEX)	DATA2(HEX)	FREQ(Hz)
0	00	00	16.0
1	00	01	16.3
2	00	02	17.0
3	00	03	17.3
4	00	04	18.0
5	00	05	18.3
6	00	06	19.0
7	00	07	19.4
8	00	08	20.0
9	00	09	20.5
10	00	0A	21.2
11	00	0B	21.8
12	00	0C	22.4
13	00	0D	23.0
14	00	0E	23.6
15	00	0F	24.4
16	00	10	25.0
17	00	11	25.9
18	00	12	26.5
19	00	13	27.4
20	00	14	28.0
21	00	15	29.0
22	00	16	30.0
23	00	17	30.7
24	00	18	31.5
25	00	19	32.5
26	00	1A	33.5
27	00	1B	34.5
28	00	1C	35.5
29	00	1D	36.5
30	00	1E	37.5
31	00	1F	38.7
32	00	20	40.0
33	00	21	41.0
34	00	22	42.5
35	00	23	43.4
36	00	24	45.0
37	00	25	46.0
38	00	26	47.5
39	00	27	48.7
40	00	28	50.0
41	00	29	51.6
42	00	2A	53.0
43	00	2B	54.6
44	00	2C	56.0
45	00	2D	57.9
46	00	2E	60.0
47	00	2F	61.3
48	00	30	63.0
49	00	31	64.9
50	00	32	67.0
51	00	33	68.8
52	00	34	71.0
53	00	35	72.9
54	00	36	75.0
55	00	37	77.2
56	00	38	80.0
57	00	39	81.8
58	00	3A	85.0
59	00	3B	86.6
60	00	3C	90.0
61	00	3D	91.7
62	00	3E	95.0
63	00	3F	97.2
64	00	40	100
65	00	41	103
66	00	42	106
67	00	43	109

MIDI(DEC)	DATA1(HEX)	DATA2(HEX)	FREQ(Hz)
68	00	44	112
69	00	45	115
70	00	46	118
71	00	47	122
72	00	48	125
73	00	49	130
74	00	4A	132
75	00	4B	137
76	00	4C	140
77	00	4D	145
78	00	4E	150
79	00	4F	154
80	00	50	160
81	00	51	163
82	00	52	170
83	00	53	173
84	00	54	180
85	00	55	183
86	00	56	190
87	00	57	194
88	00	58	200
89	00	59	205
90	00	5A	212
91	00	5B	218
92	00	5C	224
93	00	5D	230
94	00	5E	236
95	00	5F	244
96	00	60	250
97	00	61	259
98	00	62	265
99	00	63	274
100	00	64	280
101	00	65	290
102	00	66	300
103	00	67	307
104	00	68	315
105	00	69	325
106	00	6A	335
107	00	6B	345
108	00	6C	355
109	00	6D	365
110	00	6E	375
111	00	6F	387
112	00	70	400
113	00	71	410
114	00	72	425
115	00	73	434
116	00	74	450
117	00	75	460
118	00	76	475
119	00	77	487
120	00	78	500
121	00	79	516
122	00	7A	530
123	00	7B	546
124	00	7C	560
125	00	7D	579
126	00	7E	600
127	00	7F	613
128	01	00	630
129	01	01	649
130	01	02	670
131	01	03	688
132	01	04	710
133	01	05	729
134	01	06	750
135	01	07	772

## MIDI Data Table

MIDI(DEC)	DATA1(HEX)	DATA2(HEX)	FREQ(Hz)
136	01	08	800
137	01	09	818
138	01	0A	850
139	01	0B	866
140	01	0C	900
141	01	0D	917
142	01	0E	950
143	01	0F	972
144	01	10	1.00k
145	01	11	1.03k
146	01	12	1.06k
147	01	13	1.09k
148	01	14	1.12k
149	01	15	1.15k
150	01	16	1.18k
151	01	17	1.22k
152	01	18	1.25k
153	01	19	1.30k
154	01	1A	1.32k
155	01	1B	1.37k
156	01	1C	1.40k
157	01	1D	1.45k
158	01	1E	1.50k
159	01	1F	1.54k
160	01	20	1.60k
161	01	21	1.63k
162	01	22	1.70k
163	01	23	1.73k
164	01	24	1.80k
165	01	25	1.83k
166	01	26	1.90k
167	01	27	1.94k
168	01	28	2.00k
169	01	29	2.05k
170	01	2A	2.12k
171	01	2B	2.18k
172	01	2C	2.24k
173	01	2D	2.30k
174	01	2E	2.36k
175	01	2F	2.44k
176	01	30	2.50k
177	01	31	2.59k
178	01	32	2.65k
179	01	33	2.74k
180	01	34	2.80k
181	01	35	2.90k
182	01	36	3.00k
183	01	37	3.07k
184	01	38	3.15k
185	01	39	3.25k
186	01	3A	3.35k
187	01	3B	3.45k
188	01	3C	3.55k
189	01	3D	3.65k
190	01	3E	3.75k
191	01	3F	3.87k
192	01	40	4.00k
193	01	41	4.10k
194	01	42	4.25k
195	01	43	4.34k
196	01	44	4.50k
197	01	45	4.60k
198	01	46	4.75k
199	01	47	4.87k
200	01	48	5.00k
201	01	49	5.16k
202	01	4A	5.30k
203	01	4B	5.46k
204	01	4C	5.60k

MIDI(DEC)	DATA1(HEX)	DATA2(HEX)	FREQ(Hz)
205	01	4D	5.79k
206	01	4E	6.00k
207	01	4F	6.13k
208	01	50	6.30k
209	01	51	6.49k
210	01	52	6.70k
211	01	53	6.88k
212	01	54	7.10k
213	01	55	7.29k
214	01	56	7.50k
215	01	57	7.72k
216	01	58	8.00k
217	01	59	8.18k
218	01	5A	8.50k
219	01	5B	8.66k
220	01	5C	9.00k
221	01	5D	9.17k
222	01	5E	9.50k
223	01	5F	9.72k
224	01	60	10.0k
225	01	61	10.3k
226	01	62	10.6k
227	01	63	10.9k
228	01	64	11.2k
229	01	65	11.5k
230	01	66	11.8k
231	01	67	12.2k
232	01	68	12.5k
233	01	69	13.0k
234	01	6A	13.2k
235	01	6B	13.7k
236	01	6C	14.0k
237	01	6D	14.5k
238	01	6E	15.0k
239	01	6F	15.4k
240	01	70	16.0k
241	01	71	16.3k
242	01	72	17.0k
243	01	73	17.3k
244	01	74	18.0k
245	01	75	18.3k
246	01	76	19.0k
247	01	77	19.4k
248	01	78	20.0k
249	01	79	20.5k
250	01	7A	21.2k
251	01	7B	21.8k
252	01	7C	22.4k
253	01	7D	23.0k
254	01	7E	23.6k
255	01	7F	24.4k

**DX Algorithm Chart**

1	2	3
4	5	6
7	8	9
10	11	12

■ : CARRIER    ● : MODULATOR

Function...	Transmitted	Recognized	Remarks	
Basic Channel	Default Changed 1 - 11 X	1 - 11 X		
Mode	Default Messages Altered X X *****	3 3,4 (m=1) *1 X		
Note Number : True voice	0 - 127 *****	0 - 127 0 - 127		
Velocity	Note ON Note OFF	O 9nH,v=1-127 X 8nH,v=0	O 9nH,v=1-127 X 9nH,v=0 or 8nH	
After Touch	Key's Ch's	X X	X X	
Pitch Bend	O	O		
Control Change	0,32 5 7,10 6,38 11 20,21,25-29 23,24 64 65 66 71,73-75 91,94 96,97 100,101 102-119 126,127	O O O X X O X X O X O O X X O O X	O O O O O O O O O O O O O O O O	Bank Select Portamento Time Channel Volume,Pan Data Entry Expresion Model-Specific *2 Model-Specific *2 Sustain Switch Portamento Switch Sostenuto Sound Control Reverb/Delay Send RPN Inc,Dec RPN LSB,MSB Model-Specific *2 Mono On,Poly On
Prog Change : True #	O 0 - 127 *3 *****	O 0 - 127 *3 O 0 - 127 *3		
System Exclusive	O *3	O		
Common : Song Pos. : Song Sel. : Tune	X X X	X X X		
System : Clock Real Time : Commands	O *4 O *3	O *5 O		
Aux : All Sound Off : Reset All Cntrls : Local ON/OFF Mes- : All Notes OFF sages: Active Sense : Reset	X X X X O X	O (120) O (121) X O (123-125) O X		

Notes: \*1 m is always treated as "1" regardless of its value.  
 \*2 Please refer to the manual.  
 \*3 If switch is on.  
 \*4 If clock out is on and SEQTRAK uses the internal clock.  
 \*5 If MIDI sync is "MIDI(Auto)".

Mode 1 : OMNI ON , POLY                      Mode 2 : OMNI ON ,MONO                      O : Yes  
 Mode 3 : OMNI OFF, POLY                    Mode 4 : OMNI OFF,MONO                    X : No

