

#### 4.24D Data Response Message

Byte #	Value/type	Description
1	\$F0	start byte
2	0	sys-ex id escapement
3	1	Ashly Midi manufacturer id, most significant byte
4	\$2A	Ashly Midi manufacturer id, least significant byte
5	4	4.24D model number
6	<i>n</i>	Midi channel number (\$0-F)
7	2	message type: Data Response
8	preset name character 1	ASCII values \$20-\$7A, except \$5C
9	preset name character 2	
10	preset name character 3	
11	preset name character 4	
12	preset name character 5	
13	preset name character 6	
14	preset name character 7	
15	preset name character 8	
16	preset name character 9	
17	preset name character 10	
18	preset name character 11	
19	preset name character 12	
20	preset name character 13	
21	preset name character 14	
22	preset name character 15	
23	preset name character 16	
24	preset name character 17	
25	preset name character 18	
26	preset name character 19	
27	preset name character 20	
28	output 1 source	0000ABCD, input source enabled if bit is set, (upper nibble unused)
29	output 2 source	
30	output 3 source	
31	output 4 source	
32	output 5 source	
33	output 6 source	
34	output 7 source	
35	output 8 source	
36	eq i/o 1	00AB1234, 0 = out, 1 = in
37	eq i/o 2	00CD5678, 0 = out, 1 = in
38	limiter i/o 1	00001234, 0 = out, 1 = in
39	limiter i/o 2	00005678, 0 = out, 1 = in
40	output polarities 1	00001234, 0 = normal, 1 = inverted
41	output polarities 2	00005678, 0 = normal, 1 = inverted
42	mutes 1	00AB1234, 0 = not muted, 1 = muted
43	mutes 2	00CD5678, 0 = not muted, 1 = muted
44	input A gain	bits 13-7; 7792 to 8312 = -40dB to +12dB (0.1dB steps)
45	input A gain	bits 6-0; [8192 = 0dB]
46	input B gain	
47	input B gain	
48	input C gain	
49	input C gain	
50	input D gain	
51	input D gain	
52	output 1 gain	
53	output 1 gain	
54	output 2 gain	
55	output 2 gain	
56	output 3 gain	

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57	output 3 gain	
58	output 4 gain	
59	output 4 gain	
60	output 5 gain	
61	output 5 gain	
62	output 6 gain	
63	output 6 gain	
64	output 7 gain	
65	output 7 gain	
66	output 8 gain	
67	output 8 gain	
68	<i>reserved</i>	
69	<i>reserved</i>	
70	<i>reserved</i>	
71	<i>reserved</i>	
72	<i>reserved</i>	
73	<i>reserved</i>	
74	<i>reserved</i>	
75	<i>reserved</i>	
76	<i>reserved</i>	
77	<i>reserved</i>	
78	<i>reserved</i>	
79	<i>reserved</i>	
80	<i>reserved</i>	
81	<i>reserved</i>	
82	<i>reserved</i>	
83	<i>reserved</i>	
84	output 1 limiter threshold	\$2C-\$54 = -20 to +20dBu
85	output 1 limiter ratio	0-7 = 1.2, 1.5, 2, 3, 4, 6, 10, 20, INF:1
86	output 1 limiter attack	0-6 = 0.5, 1, 2, 5, 10, 20, 50ms
87	output 1 limiter release	0-6 = 10, 20, 50, 100, 200, 500, 1000ms
88	output 2 limiter threshold	
89	output 2 limiter ratio	
90	output 2 limiter attack	
91	output 2 limiter release	
92	output 3 limiter threshold	
93	output 3 limiter ratio	
94	output 3 limiter attack	
95	output 3 limiter release	
96	output 4 limiter threshold	
97	output 4 limiter ratio	
98	output 4 limiter attack	
99	output 4 limiter release	
100	output 5 limiter threshold	
101	output 5 limiter ratio	
102	output 5 limiter attack	
103	output 5 limiter release	
104	output 6 limiter threshold	
105	output 6 limiter ratio	
106	output 6 limiter attack	
107	output 6 limiter release	
108	output 7 limiter threshold	
109	output 7 limiter ratio	
110	output 7 limiter attack	
111	output 7 limiter release	
112	output 8 limiter threshold	

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113	output 8 limiter ratio	
114	output 8 limiter attack	
115	output 8 limiter release	
116	<i>reserved</i>	
117	<i>reserved</i>	
118	<i>reserved</i>	
119	<i>reserved</i>	
120	<i>reserved</i>	
121	<i>reserved</i>	
122	<i>reserved</i>	
123	<i>reserved</i>	
124	<i>reserved</i>	
125	<i>reserved</i>	
126	<i>reserved</i>	
127	<i>reserved</i>	
128	output 1 delay	bits 20-14; Delay(sec) = [20-bit value]/48,000
129	output 1 delay	bits 13-7
130	output 1 delay	bits 6-0
131	output 2 delay	maximum value = 32,762 = 682.542ms of delay
132	output 2 delay	
133	output 2 delay	
134	output 3 delay	
135	output 3 delay	
136	output 3 delay	
137	output 4 delay	
138	output 4 delay	
139	output 4 delay	
140	output 5 delay	
141	output 5 delay	
142	output 5 delay	
143	output 6 delay	
144	output 6 delay	
145	output 6 delay	
146	output 7 delay	
147	output 7 delay	
148	output 7 delay	
149	output 8 delay	
150	output 8 delay	
151	output 8 delay	
152	output 1 hpf frequency	bits 13-7; range: 10-254 = OFF-21.98kHz
153	output 1 hpf frequency	bits 6-0; $F = 1000 * 2^{[(Value - 147)/24]}$ , except 10 = OFF
154	output 1 hpf type	0-7 = Bwrth2, Bes2, Lnk2, Bwrth/Lnk3, Bes3, Bwrth4, Bes4, Lnk4
155	output 1 lpf frequency	bits 13-7; range: 11-255 = 19.7Hz-OFF
156	output 1 lpf frequency	bits 6-0; $F = 1000 * 2^{[(Value - 147)/24]}$ , except 255 = OFF
157	output 1 lpf type	0-7 = Bwrth2, Bes2, Lnk2, Bwrth/Lnk3, Bes3, Bwrth4, Bes4, Lnk4
158	output 2 hpf frequency	
159	output 2 hpf frequency	
160	output 2 hpf type	
161	output 2 lpf frequency	
162	output 2 lpf frequency	
163	output 2 lpf type	
164	output 3 hpf frequency	
165	output 3 hpf frequency	
166	output 3 hpf type	
167	output 3 lpf frequency	
168	output 3 lpf frequency	

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169	output 3 lpf type	
170	output 4 hpf frequency	
171	output 4 hpf frequency	
172	output 4 hpf type	
173	output 4 lpf frequency	
174	output 4 lpf frequency	
175	output 4 lpf type	
176	output 5 hpf frequency	
177	output 5 hpf frequency	
178	output 5 hpf type	
179	output 5 lpf frequency	
180	output 5 lpf frequency	
181	output 5 lpf type	
182	output 6 hpf frequency	
183	output 6 hpf frequency	
184	output 6 hpf type	
185	output 6 lpf frequency	
186	output 6 lpf frequency	
187	output 6 lpf type	
188	output 7 hpf frequency	
189	output 7 hpf frequency	
190	output 7 hpf type	
191	output 7 lpf frequency	
192	output 7 lpf frequency	
193	output 7 lpf type	
194	output 8 hpf frequency	
195	output 8 hpf frequency	
196	output 8 hpf type	
197	output 8 lpf frequency	
198	output 8 lpf frequency	
199	output 8 lpf type	
200	frequency	<b>A-1</b> bits 13-7; range: 11-254 <span style="float: right;"><b>EQ Filters</b></span>
201	frequency	bits 6-0; $F = 1000 * 2^{[(Value - 147)/24]}$
202	Q	refer to Q table
203	level	bits 13-7; 0.1dB steps, 8192 = 0dB
204	level	bits 6-0
205	type	0-4 = PEQ, LS1, LS2, HS1, HS2
206	frequency	<b>A-2</b>
207	frequency	
208	Q	
209	level	
210	level	
211	type	
212	frequency	<b>A-3</b>
213	frequency	
214	Q	
215	level	
216	level	
217	type	
218	frequency	<b>A-4</b>
219	frequency	
220	Q	
221	level	
222	level	
223	type	
224	<i>reserved</i>	<b>A-5</b>

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225	<i>reserved</i>	
226	<i>reserved</i>	
227	<i>reserved</i>	
228	<i>reserved</i>	
229	<i>reserved</i>	
230	<i>reserved</i>	<b>A-6</b>
231	<i>reserved</i>	
232	<i>reserved</i>	
233	<i>reserved</i>	
234	<i>reserved</i>	
235	<i>reserved</i>	
236	frequency	<b>B-1</b>
237	frequency	
238	Q	
239	level	
240	level	
241	type	
242	frequency	<b>B-2</b>
243	frequency	
244	Q	
245	level	
246	level	
247	type	
248	frequency	<b>B-3</b>
249	frequency	
250	Q	
251	level	
252	level	
253	type	
254	frequency	<b>B-4</b>
255	frequency	
256	Q	
257	level	
258	level	
259	type	
260	<i>reserved</i>	<b>B-5</b>
261	<i>reserved</i>	
262	<i>reserved</i>	
263	<i>reserved</i>	
264	<i>reserved</i>	
265	<i>reserved</i>	
266	<i>reserved</i>	<b>B-6</b>
267	<i>reserved</i>	
268	<i>reserved</i>	
269	<i>reserved</i>	
270	<i>reserved</i>	
271	<i>reserved</i>	
272	frequency	<b>C-1</b>
273	frequency	
274	Q	
275	level	
276	level	
277	type	
278	frequency	<b>C-2</b>
279	frequency	
280	Q	

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281	level	
282	level	
283	type	
284	frequency	<b>C-3</b>
285	frequency	
286	Q	
287	level	
288	level	
289	type	
290	frequency	<b>C-4</b>
291	frequency	
292	Q	
293	level	
294	level	
295	type	
296	<i>reserved</i>	<b>C-5</b>
297	<i>reserved</i>	
298	<i>reserved</i>	
299	<i>reserved</i>	
300	<i>reserved</i>	
301	<i>reserved</i>	
302	<i>reserved</i>	<b>C-6</b>
303	<i>reserved</i>	
304	<i>reserved</i>	
305	<i>reserved</i>	
306	<i>reserved</i>	
307	<i>reserved</i>	
308	frequency	<b>D-1</b>
309	frequency	
310	Q	
311	level	
312	level	
313	type	
314	frequency	<b>D-2</b>
315	frequency	
316	Q	
317	level	
318	level	
319	type	
320	frequency	<b>D-3</b>
321	frequency	
322	Q	
323	level	
324	level	
325	type	
326	frequency	<b>D-4</b>
327	frequency	
328	Q	
329	level	
330	level	
331	type	
332	<i>reserved</i>	<b>D-5</b>
333	<i>reserved</i>	
334	<i>reserved</i>	
335	<i>reserved</i>	
336	<i>reserved</i>	

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337	<i>reserved</i>	
338	<i>reserved</i>	<b>D-6</b>
339	<i>reserved</i>	
340	<i>reserved</i>	
341	<i>reserved</i>	
342	<i>reserved</i>	
343	<i>reserved</i>	
344	frequency	<b>1-1</b>
345	frequency	
346	Q	
347	level	
348	level	
349	type	
350	frequency	<b>1-2</b>
351	frequency	
352	Q	
353	level	
354	level	
355	type	
356	frequency	<b>1-3</b>
357	frequency	
358	Q	
359	level	
360	level	
361	type	
362	<i>reserved</i>	<b>1-4</b>
363	<i>reserved</i>	
364	<i>reserved</i>	
365	<i>reserved</i>	
366	<i>reserved</i>	
367	<i>reserved</i>	
368	frequency	<b>2-1</b>
369	frequency	
370	Q	
371	level	
372	level	
373	type	
374	frequency	<b>2-2</b>
375	frequency	
376	Q	
377	level	
378	level	
379	type	
380	frequency	<b>2-3</b>
381	frequency	
382	Q	
383	level	
384	level	
385	type	
386	<i>reserved</i>	<b>2-4</b>
387	<i>reserved</i>	
388	<i>reserved</i>	
389	<i>reserved</i>	
390	<i>reserved</i>	
391	<i>reserved</i>	
392	frequency	<b>3-1</b>

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393	frequency	
394	Q	
395	level	
396	level	
397	type	
398	frequency	<b>3-2</b>
399	frequency	
400	Q	
401	level	
402	level	
403	type	
404	frequency	<b>3-3</b>
405	frequency	
406	Q	
407	level	
408	level	
409	type	
410	<i>reserved</i>	<b>3-4</b>
411	<i>reserved</i>	
412	<i>reserved</i>	
413	<i>reserved</i>	
414	<i>reserved</i>	
415	<i>reserved</i>	
416	frequency	<b>4-1</b>
417	frequency	
418	Q	
419	level	
420	level	
421	type	
422	frequency	<b>4-2</b>
423	frequency	
424	Q	
425	level	
426	level	
427	type	
428	frequency	<b>4-3</b>
429	frequency	
430	Q	
431	level	
432	level	
433	type	
434	<i>reserved</i>	<b>4-4</b>
435	<i>reserved</i>	
436	<i>reserved</i>	
437	<i>reserved</i>	
438	<i>reserved</i>	
439	<i>reserved</i>	
440	frequency	<b>5-1</b>
441	frequency	
442	Q	
443	level	
444	level	
445	type	
446	frequency	<b>5-2</b>
447	frequency	
448	Q	

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449	level	
450	level	
451	type	
452	frequency	<b>5-3</b>
453	frequency	
454	Q	
455	level	
456	level	
457	type	
458	<i>reserved</i>	<b>5-4</b>
459	<i>reserved</i>	
460	<i>reserved</i>	
461	<i>reserved</i>	
462	<i>reserved</i>	
463	<i>reserved</i>	
464	frequency	<b>6-1</b>
465	frequency	
466	Q	
467	level	
468	level	
469	type	
470	frequency	<b>6-2</b>
471	frequency	
472	Q	
473	level	
474	level	
475	type	
476	frequency	<b>6-3</b>
477	frequency	
478	Q	
479	level	
480	level	
481	type	
482	<i>reserved</i>	<b>6-4</b>
483	<i>reserved</i>	
484	<i>reserved</i>	
485	<i>reserved</i>	
486	<i>reserved</i>	
487	<i>reserved</i>	
488	frequency	<b>7-1</b>
489	frequency	
490	Q	
491	level	
492	level	
493	type	
494	frequency	<b>7-2</b>
495	frequency	
496	Q	
497	level	
498	level	
499	type	
500	frequency	<b>7-3</b>
501	frequency	
502	Q	
503	level	
504	level	

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505	type	
506	<i>reserved</i>	<b>7-4</b>
507	<i>reserved</i>	
508	<i>reserved</i>	
509	<i>reserved</i>	
510	<i>reserved</i>	
511	<i>reserved</i>	
512	frequency	<b>8-1</b>
513	frequency	
514	Q	
515	level	
516	level	
517	type	
518	frequency	<b>8-2</b>
519	frequency	
520	Q	
521	level	
522	level	
523	type	
524	frequency	<b>8-3</b>
525	frequency	
526	Q	
527	level	
528	level	
529	type	
530	<i>reserved</i>	<b>8-4</b>
531	<i>reserved</i>	
532	<i>reserved</i>	
533	<i>reserved</i>	
534	<i>reserved</i>	
535	<i>reserved</i>	
536	<i>reserved</i>	
537	<i>reserved</i>	
538	<i>reserved</i>	
539	<i>reserved</i>	
540	\$F7	end byte