

TC-Helicon VoiceLive 3 MIDI SysEx Manual

Version 1.1.00: Aug 5, 2014: firmware release 1.1.01 (Build 161)

Release Notes

Initially released firmware (1.0.00) has incorrect sysex identifiers for parameters. Setting/requesting presets will work, but the system must be upgraded to (at least) release 1.0.20 for setting/requesting parameters.

Hexadecimal Notation

Many values in this document are presented in hexadecimal notation. Hexadecimal numbers will be prefixed with "0x".

SYSEX Template

Every SYSEX message conforms to the following template:

Bytes	Description
0xF0	MIDI System exclusive message start
0x00	3 byte manufacturer's ID for TC-Helicon
0x01	...
0x38	...
<Sysex ID>	User parameter from MIDI setup menu
0x6D	Model ID (VoiceLive3)
<Message ID>	Message identifier
<Data>	Start of data
<...>	Variable number of data bytes based on message type
0xF7	MIDI System exclusive message terminator

Data Packing

The standard MIDI specification requires that SYSEX data be 7 bits wide with the most significant bit set to 0. The idea of data packing is to take 14-bit or 28-bit values and split them into 7-bit segments so that they can be sent as valid SYSEX data.

Below is an example of how 14-bit and 28-bit signed integers can be converted into SYSEX strings using Visual Basic for Applications:

```
' VBScript source code
Function create_hex(val As Integer) As String
    ' Creates a nicely formatted hex string from a value
    create_hex = Hex(val)
    If Len(create_hex) = 1 Then create_hex = "0" & create_hex
End Function

Function create_14_compliment(ByVal val As Long) As String
    Dim msb As Integer
    Dim lsb As Integer
    Dim msb_s As String
    Dim lsb_s As String
    Dim temp As Long

    temp = val

    ' deal with negative numbers
    If val < 0 Then
```

```

        temp = 16384 + val
    End If

    msb = Int(temp / 128)
    lsb = temp - (msb * 128)

    ' create hex string from values
    msb_s = create_hex(msb)
    lsb_s = create_hex(lsb)

    ' and return the sysex data portion
    create_14_compliment = msb_s & " " & lsb_s
End Function
Function create_28_compliment(ByVal val As Long) As String
    Dim msb As Integer
    Dim msb2 As Integer
    Dim msb3 As Integer
    Dim lsb As Integer
    Dim msb_s As String
    Dim msb2_s As String
    Dim msb3_s As String
    Dim lsb_s As String
    Dim temp As Long

    temp = val

    ' deal with negative numbers
    If val < 0 Then
        temp = 16384 * 16384 + val
    End If

    msb = Int(temp / 128)
    msb2 = Int(temp / 16384)
    msb3 = Int(temp / 2097152)
    lsb = temp - ((msb * 128) + (msb2 * 16384) + (msb3 * 2097152))

    ' create hex string from values
    msb_s = create_hex(msb)
    msb2_s = create_hex(msb2)
    msb3_s = create_hex(msb3)
    lsb_s = create_hex(lsb)

    ' and return the sysex data portion
    create_28_compliment = msb3_s & " " & msb2_s & " " & msb_s & " " & lsb_s
End Function

```

Preset Numbers and Names

Preset numbers are represented using 14-bit data packing. Requesting a user preset that does not exist will return an "empty preset" SYSEX notification message. Preset numbering begins at 1.

Preset names are up to 15 ASCII characters in length. Shorter strings will be NULL/zero terminated with possibly invalid data following the NULL termination.

Checksums

Checksums are used to ensure secure data transfers. They are 1 byte, holding the 7 least significant bits of the sum of all bytes contributing to the checksum.

Example: If the bytes used in a checksum calculation were the series 1,2,3 through 126, their sum total would be 8001. Dividing 8001 by 128 leaves a remainder of 65, which becomes the checksum byte.

Message References

The format of the data of each SYSEX message type varies. Below are descriptions for each message type, explaining their specific data formatting requirements.

Request Messages

Request Preset ID:0x45

<Data> is 2 bytes (packed 14-bit integer) representing the number of the preset requested. See above for a description of preset number representation. The data transmitted upon receiving this message will be formatted as **Preset Header + Preset Data**.

If preset number = 0, the product will respond by sending a preset numbered 0 with only 1 step representing the possibly edited step that is currently activated on the product.

Request Preset Header ID:0x46

<Data> is 2 bytes (packed 14-bit integer) representing the number of the preset requested. See above for a description of preset number representation. The data transmitted upon receiving this message will be formatted as **Preset Header Data**.

Request Parameter ID:0x47

<Data> is 2 bytes (packed 14-bit integer) representing the SYSEX Parameter Identifier. See the SYSEX parameter reference table for a list of accessible parameters and their Ids. The data transmitted by upon receiving this message will be formatted as **Parameter Data**.

Request Setup ID:0x15

<Data> is 1 byte. The value of this byte is ignored. The data transmitted upon receiving this message will be formatted as **Setup Data**.

Data Messages

Preset Header ID:0x20

The parameters of all steps of a preset are transferred over a series of SYSEX messages. Multiple SYSEX messages are used to enhance compatibility with MIDI devices that cannot handle large SYSEX data messages.

Preset information (name, number, and tags) is sent in a **Preset Header** message (0x20). The parameter data then follows over several **Preset Data** messages (0x21). **Preset Header** and **Preset Data** messages are always sent together and meaningless on their own.

Header <Data> is organized as follows

2 bytes	Preset Number (14-bit packed)
2 bytes	Preset Version (14-bit packed)
15 bytes	Preset Name (unpacked - ASCII characters)
4 bytes	Tags (28-bit packed)
1 byte	Step Count

Preset Data ID:0x21

A series of **Preset Data** messages always directly follow a **Preset Header** message.

<Data> is organized as follows

1 byte	Message Index (0 based)
200 bytes(cs)	25 x 28-bit preset parameters
1 byte	Checksum

Refer to the **preset table** to see how the preset parameters fit into each message.

Note: The checksum is calculated using data marked with (**cs**) above.

Parameter Data ID:0x22

<Data> is 6 bytes. The first two bytes identify the SYSEX Parameter ID. The last four bytes determine the value of the parameter represented as a 28-bit 2's complement signed value. If a value exceeds the limits of the parameter, the value will be automatically limited.

Setup Data ID:0x13

Like presets, setup data messages are also sent as a series of SYSEX messages, but no header is used.

<Data> is organized as follows

2 bytes	Setup Version (14-bit packed)
1 byte	Message Number
100 bytes(cs)	25 x 28-bit setup parameters
1 byte	Checksum

Refer to the **setup table** to see how the preset parameters fit into each message.

All messages will be sent sequentially after receiving a valid setup request.

All messages must be sequentially received to successfully overwrite setup data via SYSEX.

Misc Messages

Notification Message ID:0x34

<Data> is 1 byte.

Data=1: Preset Data Received.

Sometimes the unit needs to reorganize its internal preset bank after receiving a SYSEX preset. While this is happening, incoming preset SYSEX messages must be ignored. If this happens while you are dumping several presets to the unit, you might lose a preset in transmission without realizing it. This situation can be avoided by waiting for this message, indicating that the preset was successfully stored, before attempting to send the next.

If an entire user bank needs to be loaded and waiting for this message is programmatically impossible, restore the factory preset bank (deleting any

user presets) with the **Preset Utility** message immediately before transferring all user presets. This will ensure no internal reorganization occurs.

Data=2: The last requested preset does not exist, or the last received preset was numbered out of range.

Data=3: Memory full. There is not enough room in memory to store 10 steps for all 500 presets. If this message is received, you must make room by deleting unused presets or steps.

Data=4: The last received preset had an incompatible version number and was rejected.

Data=6: The last received preset failed its checksum calculation.

Data=7: The last received preset had too many steps specified.

Data=8: Preset SYSEX packages got out of sync, probably due to lost data. Try reducing data transmission rate on host computer.

Presets Delete ID:0x50

<Data> is 2 bytes (packed 14-bit integer) representing the number of the preset to be deleted. See above for a description of preset number representation.

VoiceLive 3 Preset Package

Preset Version 1.00

Offset	Sysex ID	Parameter	Min	Max	Centre
0	33	Guitar.Amp_Style	0	29	14
1	84	ParEq.Low_Freq.Guitar_Pre	0	240	120
2	85	ParEq.Low_Gain.Guitar_Pre	-18	18	0
3	86	ParEq.Low_BW.Guitar_Pre	0	24	12
4	87	ParEq.Hi_Freq.Guitar_Pre	0	240	120
5	88	ParEq.Hi_Gain.Guitar_Pre	-18	18	0
6	89	ParEq.Hi_BW.Guitar_Pre	0	24	12
7	90	ParEq.Par1_Freq.Guitar_Pre	0	240	120
8	91	ParEq.Par1_Gain.Guitar_Pre	-18	18	0
9	92	ParEq.Par1_BW.Guitar_Pre	0	24	12
10	94	ParEq.Low_Freq.Guitar_Post	0	240	120
11	95	ParEq.Low_Gain.Guitar_Post	-18	18	0
12	96	ParEq.Low_BW.Guitar_Post	0	24	12
13	97	ParEq.Hi_Freq.Guitar_Post	0	240	120
14	98	ParEq.Hi_Gain.Guitar_Post	-18	18	0
15	99	ParEq.Hi_BW.Guitar_Post	0	24	12
16	100	ParEq.Par1_Freq.Guitar_Post	0	240	120
17	101	ParEq.Par1_Gain.Guitar_Post	-18	18	0
18	102	ParEq.Par1_BW.Guitar_Post	0	24	12
19	104	ParEq.Low_Freq.Harm	0	240	120
20	105	ParEq.Low_Gain.Harm	-12	12	0
21	106	ParEq.Low_BW.Harm	0	32	16
22	107	ParEq.Hi_Freq.Harm	0	240	120
23	108	ParEq.Hi_Gain.Harm	-12	12	0
24	109	ParEq.Hi_BW.Harm	0	32	16
25	110	ParEq.Par1_Freq.Harm	0	240	120
26	111	ParEq.Par1_Gain.Harm	-12	12	0

27	112	ParEq.Par1_BW.Harm	0	32	16
28	116	AutoGate.ManualThresholdT	-61	0	-31
29	126	Harmony.GroupStyle_NP	0	29	14
30	127	Harmony.HumanStyle	0	6	3
31	128	Harmony.VibratoStyle	0	7	3
32	129	Harmony.HumanAmount	0	100	50
33	130	Harmony.VibratoAmount	0	100	50
34	139	Harmony.Notes_Pan	0	2	1
35	140	Harmony.Notes_Smoothing	0	100	50
36	141	Harmony.Notes_Gender	-50	50	0
37	142	Harmony.Notes_Portamento	0	200	100
38	145	NatPlay.InputSrc	0	4	2
39	147	Harmony.Key	0	11	5
40	148	Harmony.Scale	0	6	3
41	149	Harmony.Tuning	0	2	1
42	150	Harmony.Mode.V1	0	5	2
43	151	Harmony.Int_NP.V1	0	8	4
44	152	Harmony.Int_scale.V1	0	28	14
45	153	Harmony.Int_shift.V1	-24	24	0
46	154	Harmony.Int_drone.V1	-36	36	0
47	155	Harmony.Int_FixedRelKey.V1	-36	25	-6
48	157	Harmony.Smoothing.V1	0	100	50
49	159	Harmony.Gender.V1	-50	50	0
50	160	Harmony.Portamento.V1	0	200	100
51	161	Harmony.Mode.V2	0	5	2
52	162	Harmony.Int_NP.V2	0	8	4
53	163	Harmony.Int_scale.V2	0	28	14
54	164	Harmony.Int_shift.V2	-24	24	0
55	165	Harmony.Int_drone.V2	-36	36	0
56	166	Harmony.Int_FixedRelKey.V2	-36	25	-6
57	168	Harmony.Smoothing.V2	0	100	50

58	170	Harmony.Gender.V2	-50	50	0
59	171	Harmony.Portamento.V2	0	200	100
60	172	Harmony.Mode.V3	0	5	2
61	173	Harmony.Int_NP.V3	0	8	4
62	174	Harmony.Int_scale.V3	0	28	14
63	175	Harmony.Int_shift.V3	-24	24	0
64	176	Harmony.Int_drone.V3	-36	36	0
65	177	Harmony.Int_FixedRelKey.V3	-36	25	-6
66	179	Harmony.Smoothing.V3	0	100	50
67	181	Harmony.Gender.V3	-50	50	0
68	182	Harmony.Portamento.V3	0	200	100
69	183	Harmony.Mode.V4	0	5	2
70	184	Harmony.Int_NP.V4	0	8	4
71	185	Harmony.Int_scale.V4	0	28	14
72	186	Harmony.Int_shift.V4	-24	24	0
73	187	Harmony.Int_drone.V4	-36	36	0
74	188	Harmony.Int_FixedRelKey.V4	-36	25	-6
75	190	Harmony.Smoothing.V4	0	100	50
76	192	Harmony.Gender.V4	-50	50	0
77	193	Harmony.Portamento.V4	0	200	100
78	196	Choir.Style	0	12	6
79	197	Choir.Mix	0	100	50
80	214	Doubling.GroupStyle	0	11	5
81	215	Doubling.HumanStyle	0	6	3
82	216	Doubling.HumanAmount	0	100	50
83	217	Doubling.Voicing.V1	0	3	1
84	218	Doubling.Portamento.V1	0	200	100
85	219	Doubling.Gender.V1	-50	50	0
86	220	Doubling.Smoothing.V1	0	100	50
87	221	Doubling.OctShift.V1	-1200	1200	0
88	222	Doubling.Voicing.V2	0	3	1

89	223	Doubling.Portamento.V2	0	200	100
90	224	Doubling.Gender.V2	-50	50	0
91	225	Doubling.Smoothing.V2	0	100	50
92	226	Doubling.OctShift.V2	-1200	1200	0
93	227	Doubling.Voicing.V3	0	3	1
94	228	Doubling.Portamento.V3	0	200	100
95	229	Doubling.Gender.V3	-50	50	0
96	230	Doubling.Smoothing.V3	0	100	50
97	231	Doubling.OctShift.V3	-1200	1200	0
98	232	Doubling.Voicing.V4	0	3	1
99	233	Doubling.Portamento.V4	0	200	100
100	234	Doubling.Gender.V4	-50	50	0
101	235	Doubling.Smoothing.V4	0	100	50
102	236	Doubling.OctShift.V4	-1200	1200	0
103	239	MicroMod.Style.Voice	0	22	11
104	242	MicroMod.Delay_L.Voice	0	230	115
105	243	MicroMod.Delay_R.Voice	0	230	115
106	244	MicroMod.FB_L.Voice	-100	100	0
107	245	MicroMod.XFB_L.Voice	-100	100	0
108	246	MicroMod.FB_R.Voice	-100	100	0
109	247	MicroMod.XFB_R.Voice	-100	100	0
110	250	MicroMod.Mod_Speed.Voice	5	1000	502
111	251	MicroMod.Mod_LR_Phase.Voice	0	180	90
112	252	MicroMod.Mod_Wave.Voice	0	2	1
113	970	Macro.uMod_Detune.Voice	-25	25	0
114	971	Macro.uMod_Depth.Voice	0	100	50
115	253	Macro.uMod_LoCut.Voice	0	240	120
116	254	Macro.uMod_HiCut.Voice	0	240	120
117	255	MicroMod.OutPhase.Voice	0	3	1
118	256	MicroMod.Style.Guitar	0	13	6
119	259	MicroMod.Delay_L.Guitar	0	230	115

120	260	MicroMod.Delay_R.Guitar	0	230	115
121	261	MicroMod.FB_L.Guitar	-100	100	0
122	262	MicroMod.XFB_L.Guitar	-100	100	0
123	263	MicroMod.FB_R.Guitar	-100	100	0
124	264	MicroMod.XFB_R.Guitar	-100	100	0
125	267	MicroMod.Mod_Speed.Guitar	5	1000	502
126	268	MicroMod.Mod_LR_Phase.Guitar	0	180	90
127	269	MicroMod.Mod_Wave.Guitar	0	2	1
128	972	Macro.uMod_Detune.Guitar	-25	25	0
129	973	Macro.uMod_Depth.Guitar	0	100	50
130	270	Macro.uMod_LoCut.Guitar	0	240	120
131	271	Macro.uMod_HiCut.Guitar	0	240	120
132	272	MicroMod.OutPhase.Guitar	0	3	1
133	273	Delay.Tempo	45	300	172
134	274	Delay.Style.Voice	0	18	9
135	275	Delay.Source.Voice	0	1	0
136	276	Delay.Division_L.Voice	0	19	9
137	277	Delay.Division_R.Voice	0	19	9
138	278	Delay.DelayTime_L.Voice	0	2500	1250
139	279	Delay.DelayTime_R.Voice	0	2500	1250
140	280	Delay.FB_L.Voice	0	100	50
141	281	Delay.FB_R.Voice	0	100	50
142	282	Delay.XFB_L_R.Voice	0	100	50
143	283	Delay.XFB_R_L.Voice	0	100	50
144	284	Delay.FeedbackControl.Voice	0	100	50
145	285	Delay.Trails.Voice	0	1	0
146	286	Delay.Filter_Style.Voice	0	12	6
147	287	Macro.Delay_LoCut.Voice	0	240	140
148	288	Macro.Delay_HiCut.Voice	0	240	140
149	289	Macro.Delay_EQ_Mode.Voice	0	1	0
150	290	Delay.Style.Guitar	0	14	7

151	291	Delay.Source.Guitar	0	1	0
152	292	Delay.Division_L.Guitar	0	19	9
153	293	Delay.Division_R.Guitar	0	19	9
154	294	Delay.DelayTime_L.Guitar	0	2500	1250
155	295	Delay.DelayTime_R.Guitar	0	2500	1250
156	296	Delay.FB_L.Guitar	0	100	50
157	297	Delay.FB_R.Guitar	0	100	50
158	298	Delay.XFB_L_R.Guitar	0	100	50
159	299	Delay.XFB_R_L.Guitar	0	100	50
160	300	Delay.FeedbackControl.Guitar	0	100	50
161	974	Delay.ModDepth.Guitar	0	100	50
162	975	Delay.ModSpeed.Guitar	10	1000	505
163	301	Delay.Trails.Guitar	0	1	0
164	302	Delay.Filter_Style.Guitar	0	12	6
165	303	Macro.Delay_LoCut.Guitar	0	240	140
166	304	Macro.Delay_HiCut.Guitar	0	240	140
167	305	Delay.Pan.Voice	-100	100	0
168	306	Delay.Pan.Guitar	-100	100	0
169	307	Ducking.Enable.Voc_Delay	0	1	0
170	308	Ducking.Threshold.Voc_Delay	-61	0	-31
171	309	Ducking.Level.Voc_Delay	-61	0	-31
172	310	Ducking.Speed.Voc_Delay	0	36	18
173	311	Ducking.Enable.Gtr_Delay	0	1	0
174	312	Ducking.Threshold.Gtr_Delay	-61	0	-31
175	313	Ducking.Level.Gtr_Delay	-61	0	-31
176	314	Ducking.Speed.Gtr_Delay	0	36	18
177	315	Reverb.Style.Voice	0	42	21
178	316	Reverb.Type.Voice	0	13	6
179	317	Reverb.Decay.Voice	1	290	145
180	318	Reverb.PreDelay.Voice	0	100	50
181	319	Reverb.Diffuse.Voice	-50	50	0

182	320	Reverb.LoColor.Voice	-50	50	0
183	321	Reverb.HiColor.Voice	-50	50	0
184	322	Reverb.HiFactor.Voice	-25	25	0
185	323	Reverb.ModSpeed.Voice	-25	25	0
186	324	Reverb.ModDepth.Voice	-25	25	0
187	325	Reverb.EarlyLevel.Voice	-25	0	-13
188	326	Reverb.ReverbLevel.Voice	-25	0	-13
189	327	Reverb.DryLevel.Voice	-25	0	-13
190	328	Reverb.Style.Guitar	0	51	25
191	329	Reverb.Type.Guitar	0	13	6
192	330	Reverb.Decay.Guitar	1	290	145
193	331	Reverb.PreDelay.Guitar	0	100	50
194	332	Reverb.Diffuse.Guitar	-50	50	0
195	333	Reverb.LoColor.Guitar	-50	50	0
196	334	Reverb.HiColor.Guitar	-50	50	0
197	335	Reverb.HiFactor.Guitar	-25	25	0
198	336	Reverb.ModSpeed.Guitar	-25	25	0
199	337	Reverb.ModDepth.Guitar	-25	25	0
200	338	Reverb.EarlyLevel.Guitar	-25	0	-13
201	339	Reverb.ReverbLevel.Guitar	-25	0	-13
202	340	Reverb.DryLevel.Guitar	-25	0	-13
203	341	Ducking.Enable.Voc_Reverb	0	1	0
204	342	Ducking.Threshold.Voc_Reverb	-61	0	-31
205	343	Ducking.Level.Voc_Reverb	-61	0	-31
206	344	Ducking.Speed.Voc_Reverb	0	36	18
207	345	Ducking.Enable.Gtr_Reverb	0	1	0
208	346	Ducking.Threshold.Gtr_Reverb	-61	0	-31
209	347	Ducking.Level.Gtr_Reverb	-61	0	-31
210	348	Ducking.Speed.Gtr_Reverb	0	36	18
211	349	Synth.Style	0	12	6
212	350	Synth.Lead_Mix	0	100	50

213	351	Synth.Carrier	0	11	5
214	352	Synth.Carrier_Shift	0	3	1
215	353	Synth.Carrier_Mix	0	100	50
216	354	Synth.Gender	-50	50	0
217	355	Synth.Note_Source	0	1	0
218	356	Synth.Resolution	1	100	50
219	357	Synth.Harmonies	0	1	0
220	662	Transducer.Style	0	9	4
221	663	Transducer.Routing	0	4	2
222	664	Transducer.DistortionAmount	0	100	50
223	665	Transducer.BandLimitHP	0	240	120
224	666	Transducer.BandLimitLP	0	240	120
225	667	Transducer.PreGain	-20	20	0
226	668	Transducer.PostGain	-20	20	0
227	669	Transducer.DistortionType	0	14	7
228	670	Transducer.PresenceGain	-20	20	0
229	671	Transducer.PresenceFC	100	195	147
230	672	Transducer.PresenceBW	0	16	8
231	---	<Reserved>	---	---	---
232	---	<Reserved>	---	---	---
233	---	<Reserved>	---	---	---
234	---	<Reserved>	---	---	---
235	---	<Reserved>	---	---	---
236	694	Octaver.Style	0	5	2
237	695	Octaver.Mix	0	100	50
238	696	Octaver.Interval	-24	24	0
239	697	Wah.Style	0	9	4
240	698	Wah.SubType	0	2	1
241	699	Wah.Order	0	1	0
242	700	Wah.Sensitivity	0	10	5
243	701	Wah.Response	0	11	5

244	702	Wah.Fmax	0	240	120
245	703	Wah.HiCut	0	240	120
246	704	Wah.Resonance	0	100	50
247	705	Wah.Bpm	20	600	310
248	706	Wah.Shape	0	1	0
249	707	Wah.OutputTrim	-12	12	0
250	708	Pedal.Wah_MinPos	0	100	50
251	709	Pedal.Wah_MaxPos	0	100	50
252	710	GtrComp.Style.Pre	0	4	2
253	711	GtrComp.Ratio.Pre	0	14	7
254	712	GtrComp.Threshold.Pre	-50	0	-25
255	713	GtrComp.Attack.Pre	0	19	9
256	714	GtrComp.Release.Pre	0	19	9
257	715	GtrComp.MakeUpGain.Pre	0	30	15
258	721	Macro.GtrAmpSag	0	10	5
259	722	GtrDist.PostGain	-40	18	-11
260	723	GtrDist.DCGain	-100	100	0
261	724	GtrDist.Mode	0	1	0
262	725	GtrDist.LowCut_FC	0	72	36
263	726	Macro.GtrAmpPreDrive	-9	60	25
264	727	GtrBoost.SubStyle	0	2	1
265	728	GtrBoost.PostGain	-40	18	-11
266	729	Macro.GtrBoostPreDrive	-9	60	25
267	730	GtrSpkrEmu.Gain	-20	20	0
268	731	GtrSpkrEmu.Q	0	16	8
269	732	GtrSpkrEmu.Fc	0	240	120
270	734	Guitar.Pan	-100	100	0
271	735	Hardtune.Style	0	6	3
272	736	Correct.KeySource	0	3	1
273	737	Correct.Amount	0	100	50
274	738	Correct.Window	0	60	30

275	739	Correct.Rate	0	100	50
276	740	Correct.Shift	-36	36	0
277	742	Correct.Lead_Gender	-50	50	0
278	743	CorrectionMapCus.Bitfield	0	4095	2047
279	744	Correct.Key	0	11	5
280	747	Correct.Scale	0	5	2
281	748	Preset.PrePost.Gtr	0	1	0
282	773	HitControl.Micromod	0	3	1
283	774	HitControl.Delay	0	3	1
284	775	HitControl.Reverb	0	3	1
285	776	HitControl.Harmony	0	3	1
286	777	HitControl.Double	0	3	1
287	778	HitControl.Transducer	0	3	1
288	779	HitControl.Correct	0	3	1
289	780	HitControl.Choir	0	3	1
290	781	HitControl.Rhythmic	0	3	1
291	782	HitControl.Stutter	0	3	1
292	783	HitControl.Synth	0	3	1
293	784	HitControl.VocWhammy	0	3	1
294	785	HitControl.Gtr_Wah	0	3	1
295	786	HitControl.Gtr_Boost	0	3	1
296	787	HitControl.Gtr_Micromod	0	3	1
297	788	HitControl.Gtr_Delay	0	3	1
298	789	HitControl.Gtr_Reverb	0	3	1
299	790	HitControl.Gtr_Compressor	0	3	1
300	791	HitControl.Gtr_Amp	0	3	1
301	792	HitControl.Gtr_Shift	0	3	1
302	793	HitControl.Gtr_Rhythmic	0	3	1
303	794	HitState.Vocal	0	1	0
304	795	HitState.Guitar	0	1	0
305	796	HarmonyMapCus.Root	0	16777215	8388607

306	797	HarmonyMapCus.Minor2	0	16777215	8388607
307	798	HarmonyMapCus.Major2	0	16777215	8388607
308	799	HarmonyMapCus.Minor3	0	16777215	8388607
309	800	HarmonyMapCus.Major3	0	16777215	8388607
310	801	HarmonyMapCus.Perfect4	0	16777215	8388607
311	802	HarmonyMapCus.Augmented4	0	16777215	8388607
312	803	HarmonyMapCus.Perfect5	0	16777215	8388607
313	804	HarmonyMapCus.Minor6	0	16777215	8388607
314	805	HarmonyMapCus.Major6	0	16777215	8388607
315	806	HarmonyMapCus.Minor7	0	16777215	8388607
316	807	HarmonyMapCus.Major7	0	16777215	8388607
317	808	Rhythmic.Style	0	10	5
318	809	Rhythmic.Division	0	19	9
319	812	Rhythmic.Depth	0	100	50
320	821	Rhythmic.Target	0	6	3
321	822	Rhythmic.Rhythmn	0	22	11
322	827	Stutter.Style	0	3	1
323	828	Stutter.Sample_Division	9	19	14
324	829	Stutter.Sample_Mode	0	2	1
325	830	Stutter.Sample_Reverse	0	1	0
326	831	Stutter.Path	0	1	0
327	833	GtrRhythm.Style	0	6	3
328	834	GtrRhythm.Depth	0	100	50
329	835	GtrRhythm.Division	0	19	9
330	836	GtrRhythm.Waveform	0	4	2
331	838	GtrRhythm.ClockBPM	45	300	172
332	839	GtrRhythm.Target	0	1	0
333	849	LeadLevel.uMod	-61	0	-60
334	850	LeadLevel.Delay	-61	0	-60
335	851	LeadLevel.Reverb	-61	0	-60
336	852	LeadLevel.Harmony	-61	0	-60

337	853	LeadLevel.Double	-61	0	-60
338	854	LeadLevel.Preset	-61	0	-60
339	866	Mixer_LP.Pan.Lead	-100	100	0
340	867	Mixer_LP.Level.H1	-61	0	-31
341	868	Mixer_LP.Pan.H1	-100	100	0
342	869	Mixer_LP.Level.H2	-61	0	-31
343	870	Mixer_LP.Pan.H2	-100	100	0
344	871	Mixer_LP.Level.H3	-61	0	-31
345	872	Mixer_LP.Pan.H3	-100	100	0
346	873	Mixer_LP.Level.H4	-61	0	-31
347	874	Mixer_LP.Pan.H4	-100	100	0
348	875	Mixer_LP.Level.D1	-61	0	-31
349	876	Mixer_LP.Pan.D1	-100	100	0
350	877	Mixer_LP.Level.D2	-61	0	-31
351	878	Mixer_LP.Pan.D2	-100	100	0
352	879	Mixer_LP.Level.D3	-61	0	-31
353	880	Mixer_LP.Pan.D3	-100	100	0
354	881	Mixer_LP.Level.D4	-61	0	-31
355	882	Mixer_LP.Pan.D4	-100	100	0
356	883	Mixer_L.Doubling	-61	6	-28
357	884	Mixer_L.Harmony	-61	6	-28
358	885	Mixer_L.Synth	-61	6	-28
359	886	Mixer_L.Lead2Choir	-61	0	-31
360	887	Mixer_L.Harm2Choir	-61	0	-31
361	888	Mixer_L.Lead2uMod	-61	0	-31
362	889	Mixer_L.Harm2uMod	-61	0	-31
363	890	Mixer_L.Choir2uMod	-61	0	-31
364	891	Mixer_L.Lead2Delay	-61	0	-31
365	892	Mixer_L.Lead2DelayPan	-100	100	0
366	893	Mixer_L.Harm2Delay	-61	0	-31
367	894	Mixer_L.Choir2Delay	-61	0	-31

368	895	Mixer_L.uMod2Delay	-61	0	-31
369	896	Mixer_L.Lead2Reverb	-61	0	-31
370	897	Mixer_L.Harm2Reverb	-61	0	-31
371	898	Mixer_L.Choir2Reverb	-61	0	-31
372	900	Mixer_L.Delay2ReverbRel	-31	30	-1
373	901	Mixer_LW.Level.Voc_uMod	-61	0	-31
374	902	Mixer_LW.Width.Voc_uMod	0	100	50
375	903	Mixer_LW.Level.Voc_Delay	-61	6	-28
376	904	Mixer_LW.Width.Voc_Delay	0	100	50
377	905	Mixer_LW.Level.Voc_Reverb	-61	6	-28
378	906	Mixer_LW.Width.Voc_Reverb	0	100	50
379	907	Mixer_LW.Level.Gtr_uMod	-61	0	-31
380	908	Mixer_LW.Width.Gtr_uMod	0	100	50
381	976	Guitar.uModBypassGain	-61	0	-31
382	909	Mixer_LW.Level.Gtr_Delay	-61	0	-31
383	910	Mixer_LW.Width.Gtr_Delay	0	100	50
384	911	Mixer_LW.Level.Gtr_Reverb	-61	6	-28
385	912	Mixer_LW.Width.Gtr_Reverb	0	100	50
386	931	Mix.Preset_Trim.Voice	-6	6	0
387	932	Mixer_L.Preset_Trim.Gtr	-6	6	0
388	964	Pedal.A.Func	0	37	18
389	965	Pedal.A.MinPos	0	100	50
390	966	Pedal.A.MaxPos	0	100	50
391	---	<Reserved>	---	---	---
392	---	<Reserved>	---	---	---
393	---	<Reserved>	---	---	---
394	987	ButtonMap.Voc.MicroMod	0	28	14
395	988	ButtonMap.Voc.Delay	0	28	14
396	989	ButtonMap.Voc.Reverb	0	28	14
397	990	ButtonMap.Voc.Hit	0	28	14
398	991	ButtonMap.Voc.Double	0	28	14

399	992	ButtonMap.Voc.Harmony	0	28	14
400	993	ButtonMap.Gtr.MicroMod	0	28	14
401	994	ButtonMap.Gtr.Delay	0	28	14
402	995	ButtonMap.Gtr.Reverb	0	28	14
403	996	ButtonMap.Gtr.Hit	0	28	14
404	997	ButtonMap.Gtr.Comp	0	28	14
405	998	ButtonMap.Gtr.Drive	0	28	14
406	1001	ButtonMode.Voc.MicroMod	0	1	0
407	1002	ButtonMode.Voc.Delay	0	1	0
408	1003	ButtonMode.Voc.Reverb	0	1	0
409	1004	ButtonMode.Voc.Hit	0	1	0
410	1005	ButtonMode.Voc.Double	0	1	0
411	1006	ButtonMode.Voc.Harmony	0	1	0
412	1007	ButtonMode.Gtr.MicroMod	0	1	0
413	1008	ButtonMode.Gtr.Delay	0	1	0
414	1009	ButtonMode.Gtr.Reverb	0	1	0
415	1010	ButtonMode.Gtr.Hit	0	1	0
416	1011	ButtonMode.Gtr.Comp	0	1	0
417	1012	ButtonMode.Gtr.Drive	0	1	0
418	1020	ButtonParm1.Voc.MicroMod	-65536	65535	-1
419	1021	ButtonParm1.Voc.Delay	-65536	65535	-1
420	1022	ButtonParm1.Voc.Reverb	-65536	65535	-1
421	1023	ButtonParm1.Voc.Hit	-65536	65535	-1
422	1024	ButtonParm1.Voc.Double	-65536	65535	-1
423	1025	ButtonParm1.Voc.Harmony	-65536	65535	-1
424	1026	ButtonParm1.Gtr.MicroMod	-65536	65535	-1
425	1027	ButtonParm1.Gtr.Delay	-65536	65535	-1
426	1028	ButtonParm1.Gtr.Reverb	-65536	65535	-1
427	1029	ButtonParm1.Gtr.Hit	-65536	65535	-1
428	1030	ButtonParm1.Gtr.Comp	-65536	65535	-1
429	1031	ButtonParm1.Gtr.Drive	-65536	65535	-1

430	1032	ButtonParm2.Voc.MicroMod	-65536	65535	-1
431	1033	ButtonParm2.Voc.Delay	-65536	65535	-1
432	1034	ButtonParm2.Voc.Reverb	-65536	65535	-1
433	1035	ButtonParm2.Voc.Hit	-65536	65535	-1
434	1036	ButtonParm2.Voc.Double	-65536	65535	-1
435	1037	ButtonParm2.Voc.Harmony	-65536	65535	-1
436	1038	ButtonParm2.Gtr.MicroMod	-65536	65535	-1
437	1039	ButtonParm2.Gtr.Delay	-65536	65535	-1
438	1040	ButtonParm2.Gtr.Reverb	-65536	65535	-1
439	1041	ButtonParm2.Gtr.Hit	-65536	65535	-1
440	1042	ButtonParm2.Gtr.Comp	-65536	65535	-1
441	1043	ButtonParm2.Gtr.Drive	-65536	65535	-1
442	1046	Global.Voc_MicroMod	0	1	0
443	1047	Global.Voc_Delay	0	1	0
444	1048	Global.Voc_Reverb	0	1	0
445	1049	Global.Voc_Harmony	0	1	0
446	1050	Global.Voc_Double	0	1	0
447	1051	Global.Voc_Transducer	0	1	0
448	1052	Global.Voc_Hardtune	0	1	0
449	1053	Global.Voc_Rhythmic	0	1	0
450	1054	Global.Voc_Stutter	0	1	0
451	1055	Global.Voc_Chair	0	1	0
452	1056	Global.Voc_Whammy	0	1	0
453	1057	Global.Voc_Synth	0	1	0
454	1058	Global.Voc_Buttonmap	0	1	0
455	1059	Global.Gtr_MicroMod	0	1	0
456	1060	Global.Gtr_Delay	0	1	0
457	1061	Global.Gtr_Reverb	0	1	0
458	1062	Global.Gtr_Amp	0	1	0
459	1063	Global.Gtr_Boost	0	1	0
460	1064	Global.Gtr_Compressor	0	1	0

461	1065	Global.Gtr_Shift	0	1	0
462	1066	Global.Gtr_Rhythmic	0	1	0
463	1067	Global.Gtr_Wah	0	1	0
464	1068	Global.Gtr_Buttonmap	0	1	0
465	1069	Global.Exp_Pedal	0	1	0
466	---	<Reserved>	---	---	---

VoiceLive 3 System Package

System Version 1.03

Offset	Sysex ID	Parameter	Min	Max	Centre
0	1071	Utility.Contrast	0	10	5
1	1	Utility.Last_Preset	0	65535	32767
2	1072	Utility.Active_ButtMap	0	1	0
3	2	Utility.Genre_Filter	0	20	10
4	3	Utility.Tune	800	960	880
5	977	Utility.HitBehaviour	0	1	0
6	1076	Utility.GainSetMode.Mic	0	1	0
7	4	Utility.KeyScale_Global	0	1	0
8	5	Utility.Tempo_Global	0	1	0
9	8	Utility.MIDI_Control	1	2	1
10	1081	Utility.MIDI_Channel_In	0	16	8
11	1082	Utility.MIDI_Channel_Out	0	16	8
12	1083	Utility.MIDI_Filter_In	0	7	3
13	1084	Utility.MIDI_Filter_Out	0	3	1
14	12	Utility.SysEx_ID	0	127	63
15	6	Utility.KBSplit_AB	0	1	0
16	7	Utility.KBSplit	0	127	63
17	13	Utility.PB_Range	0	12	6
18	14	Utility.MIDI_Transpose	-4	4	0
19	16	Utility.MIDI_Tempo	0	1	0
20	17	Utility.Input_Select	0	3	1
21	19	Utility.GuitarPhase	0	1	0
22	20	Utility.ExPedalMode	0	2	1
23	21	Utility.FootSWMode	0	2	1
24	22	Utility.RoomSenseAuto	0	1	0
25	23	Utility.Output_Level_Range	0	1	0

26	24	Utility.USBOutMode	0	2	1
27	25	Utility.Dry_Delay	0	2	1
28	26	Utility.CenterCancel	0	1	0
29	32	RoomEQ.Freq	0	104	52
30	36	PreFX.CompThresh	-60	0	-30
31	37	PreFX.CompRatio	0	14	7
32	43	AutoShape.Amount	0	100	50
33	44	AutoShape.Warmth	0	1	0
34	45	AutoShape.Auto	0	1	0
35	59	DynSmooth.Amount	0	100	50
36	60	DynSmooth.Auto	0	1	0
37	61	DynSmooth.Threshold	-30	0	-15
38	62	DynSmooth.Ratio	10	40	25
39	68	DeEsser.Amount	0	100	50
40	74	ParEq.Low_Freq.Voice	0	240	120
41	75	ParEq.Low_Gain.Voice	-12	12	0
42	76	ParEq.Low_BW.Voice	0	32	16
43	77	ParEq.Hi_Freq.Voice	0	240	120
44	78	ParEq.Hi_Gain.Voice	-12	12	0
45	79	ParEq.Hi_BW.Voice	0	32	16
46	80	ParEq.Par1_Freq.Voice	0	240	120
47	81	ParEq.Par1_Gain.Voice	-12	12	0
48	82	ParEq.Par1_BW.Voice	0	32	16
49	113	AutoGate.Mode	0	2	1
50	114	AutoGate.ManualThreshold	-61	0	-31
51	117	GuitarGate.ManualThreshold	-81	0	-41
52	119	AutoGateGain.Level.Lead	-61	0	-31
53	120	AutoGateGain.Attack.Lead	0	45	22
54	121	AutoGateGain.Release.Lead	0	45	22
55	123	AutoGateGain.Level.Harm	-61	0	-31
56	124	AutoGateGain.Attack.Harm	0	45	22

57	125	AutoGateGain.Release.Harm	0	45	22
58	132	Harmony.VibratoControl	0	1	0
59	146	NatPlay.InputSrc_Global	0	5	2
60	733	GtrSpkrEmu.Enable	0	1	0
61	741	Correct.Pitch_Amount	0	100	50
62	749	Block.Tone	0	1	0
63	817	Rhythmic.Metronome_Type	0	2	1
64	818	Rhythmic.Metronome_Level	-100	0	-50
65	1077	Looper.InputA	0	4	2
66	1078	Looper.InputB	0	4	2
67	1079	Looper.InputC	0	5	2
68	848	LeadLevel.Dry_Mute	0	1	0
69	855	Utility.Input_Gain	0	66	33
70	856	Utility.GuitarInputGain	0	18	9
71	---	<Reserved>	---	---	---
72	---	<Reserved>	---	---	---
73	859	Utility.MonitorInputGain	-31	12	-10
74	860	Utility.AuxInputGain	-31	12	-10
75	861	Utility.Talk_Trim	-8	4	-2
76	979	Utility.AuxDigDelay	0	1	0
77	913	Mix.Main.Guitar_Level	-61	0	-31
78	914	Mix.Main.Looper_Level	-31	12	-10
79	915	Mix.Main.Aux_Level	-31	12	-10
80	916	Mix.Main.Metronome_Level	-31	12	-10
81	917	Mix.Main.USB_Level	-31	12	-10
82	918	Mix.HP.Guitar_Trim	-31	12	-10
83	919	Mix.HP.Looper_Trim	-13	6	-4
84	920	Mix.HP.Metronome_Level	-31	12	-10
85	921	Mix.HP.USB_Level	-13	6	-4
86	922	Mix.HP.Aux_Level	-13	6	-4
87	923	Mix.HP.Monitor_Level	-31	12	-10

88	924	Mix.HP.RoomSense_Level	-31	12	-10
89	925	Mix.HP.Main_Trim	-13	6	-4
90	926	Mix.HP.Overall	-31	12	-10
91	927	FXMix.Voices	-61	6	-28
92	928	FXMix.Voc_Reverb	-61	6	-28
93	929	FXMix.Gtr_Reverb	-61	6	-28
94	930	Mix.GtrDirectOutMode	0	1	0
95	949	Utility.DigOutputTrim	-12	12	0
96	950	OutputMixer.Routing_Style	0	2	1
97	958	SimpleLim.Threshold.Headphone	-61	0	-31
98	959	SimpleLim.Attack.Headphone	0	19	9
99	960	SimpleLim.Release.Headphone	0	19	9
100	961	SimpleLim.Threshold.RoomSense	-61	0	-31
101	962	SimpleLim.Attack.RoomSense	0	19	9
102	963	SimpleLim.Release.RoomSense	0	19	9
103	1073	Pedal.A.Calib	0	2097151	1048575
104	1074	Pedal.B.Calib	0	2097151	1048575
105	967	Pedal.B.Func	0	36	18
106	968	Pedal.B.MinPos	0	100	50
107	969	Pedal.B.MaxPos	0	100	50
108	984	ButtonMap.ExtFootSw_1	0	33	16
109	985	ButtonMap.ExtFootSw_2	0	33	16
110	986	ButtonMap.ExtFootSw_3	0	33	16
111	999	ButtonMap.StepKey	0	33	16
112	1000	ButtonMap.MicSwitch	0	20	10
113	1013	ButtonMode.StepKey	0	1	0
114	1014	ButtonMode.ExtFootSw_4	0	1	0
115	1015	ButtonMode.ExtFootSw_5	0	1	0
116	1016	ButtonMode.ExtFootSw_6	0	1	0
117	1017	ButtonMode.ExtFootSw_1	0	1	0
118	1018	ButtonMode.ExtFootSw_2	0	1	0

119	1019	ButtonMode.ExtFootSw_3	0	1	0
120	1075	ButtonMode.MicSwitch	0	1	0
121	1044	Global.Gtr_All_Global	0	1	0
122	1045	Global.Preset_Num	0	500	250
123	1085	Mix.Main.Overall	-30	0	-15
124	1086	Utility.Mic_AutoNudge	0	1	0
125	981	ButtonMap.ExtFootSw_4	0	33	16
126	982	ButtonMap.ExtFootSw_5	0	33	16
127	983	ButtonMap.ExtFootSw_6	0	33	16