

Dániel Péter Birò

De Natura et Origine

(2022)

For Counterenor, Shawm, Accordion and Live-Electronics
Für Counterenor, Schalmei, Akkordeon und Live-Elektronik

SPIELPARTITUR
PERFORMANCE SCORE



eg 2616

IMPRESSUM

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Tue Nov 29 2022,
TH

Daniel Biro
De natura et Origine

Technical documentation

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Equipment

8 PA loudspeakers
1 digital mixing
1 Behringer XTouch
1 MacBookPro with Max8

microphones

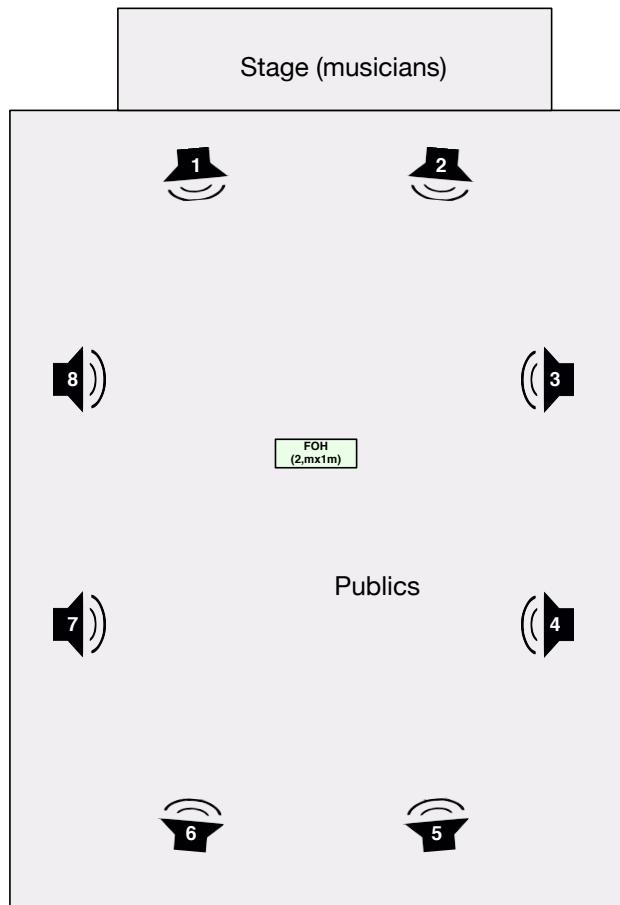
Counter tenor: Headset
Shawm: Sennheiser MKE1 clipped onto the instrument
Accordion: 2 x KMS105 (left/right)

To do

Sigmund~ and timbre do not work reliable, ie. they may stop to output after a while. They can be restarted by switching off and on dac~.

In this version, a second max clone was used to send pitch tracker and timbre values to the first max clone through OSC. Use the file *second pitch tracker.maxpat*. In this patch, the day is switched automatically from time to time.

Loudspeakers



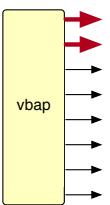
Explanations

vbap is a max external and spatializes an audio signal input to n loudspeakers. In this case, n is 8.

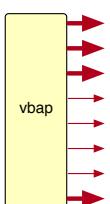
It takes two parameters:

- The direction (azimuth) in degrees from 0 to 360
- The spread in degrees from 0 to 360

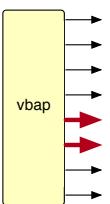
Examples:



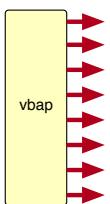
Examples: azimuth of 0 degree,
spread of 0 degree



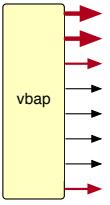
Examples: azimuth of 0 degree,
spread of 180 degree



Examples: azimuth of 180 degree,
spread of 0 degree



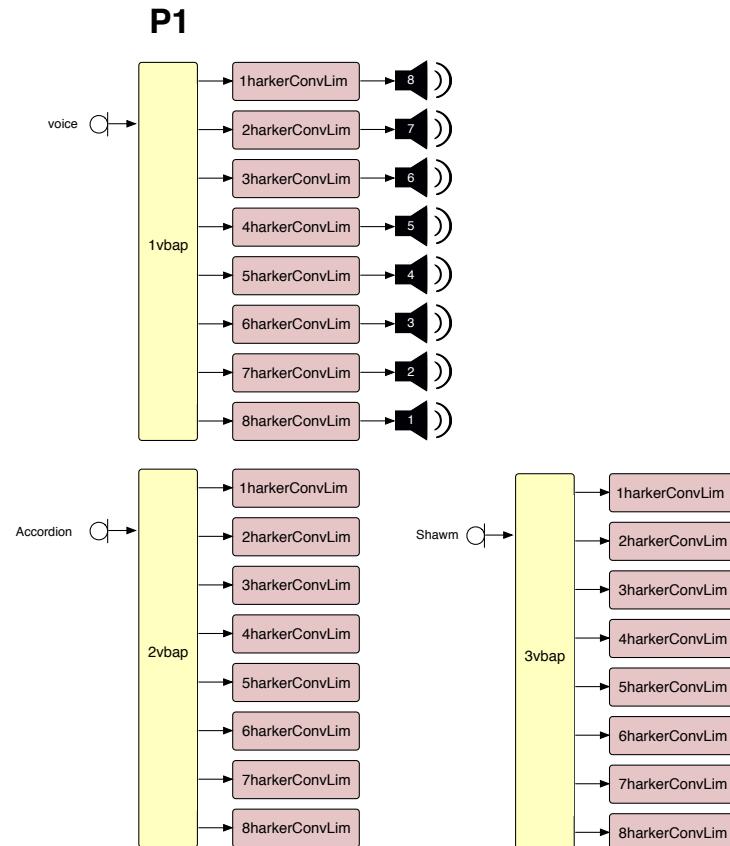
Examples: azimuth of 0 degree,
spread of 360 degree



Examples: azimuth of 0 degree,
spread of 90 degree

Control of vbap

The vbaps are controlled by input signals, ie. pitch, timbre and loudness.
The control value (ie. pitch) is scaled to degrees (iew. of the direction)

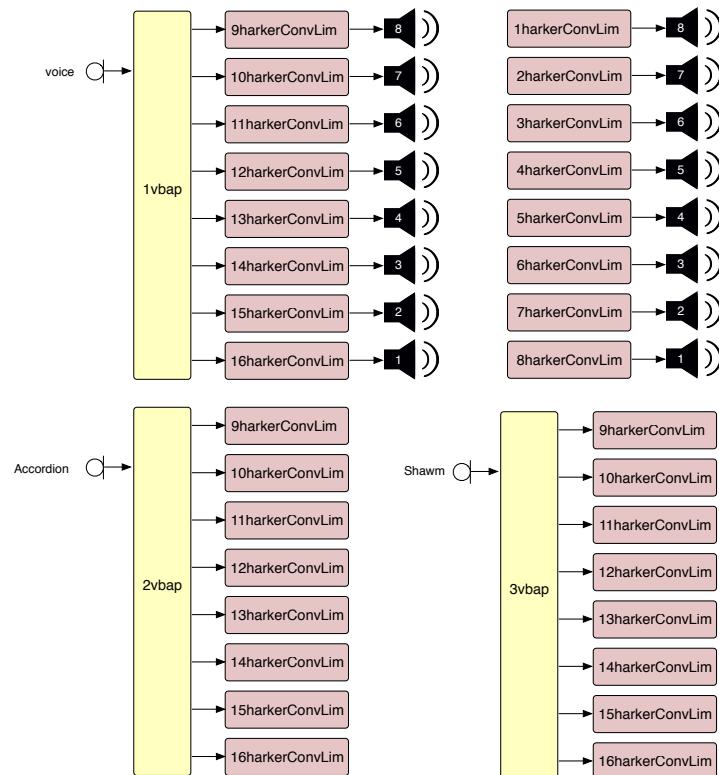


1harkerConv: model_1_Hamilton Mausoleum
 2harkerConv: model_1_Hamilton Mausoleum
 3harkerConv: model_1_Hamilton Mausoleum
 4harkerConv: model_1_Hamilton Mausoleum
 5harkerConv: model_1_Hamilton Mausoleum
 6harkerConv: model_1_Hamilton Mausoleum
 7harkerConv: model_1_Hamilton Mausoleum
 8harkerConv: model_1_Hamilton Mausoleum

All peak limiters at -10dB

azimuth1 is controlled by the pitch of the voice, scaling MIDI 61 63 to 1 360 degree
 spread1 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 61 63 to 181 540 degree
 spread2 is controlled by the loudness of the accordion, scaling 0 0.02 to 2 180 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 61 63 to 181 540 degree
 spread3 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree

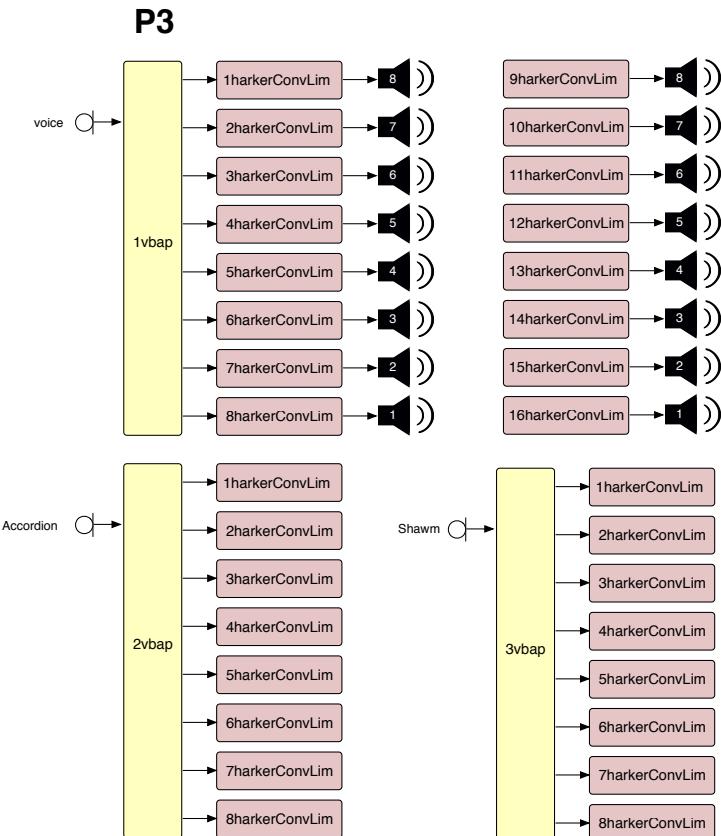
P2



1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 1_Hamilton Mausoleum
 3harkerConv: model 1_Hamilton Mausoleum
 4harkerConv: model 1_Hamilton Mausoleum
 5harkerConv: model 2_NYC Sportscenter
 6harkerConv: model 2_NYC Sportscenter
 7harkerConv: model 2_NYC Sportscenter
 8harkerConv: model 2_NYC Sportscenter

All peak limiters at -10dB

azimuth1 is controlled by the pitch of the voice, scaling MIDI 61 64 to 0 360 degree
 spread1 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 61 64 to 180 540 degree
 spread2 is controlled by the timbre of the voice, scaling 0 10 2 180 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 61 64 to 180 540 degree
 spread3 is controlled by the timbre of the voice, scaling 0 10 2 180 degree



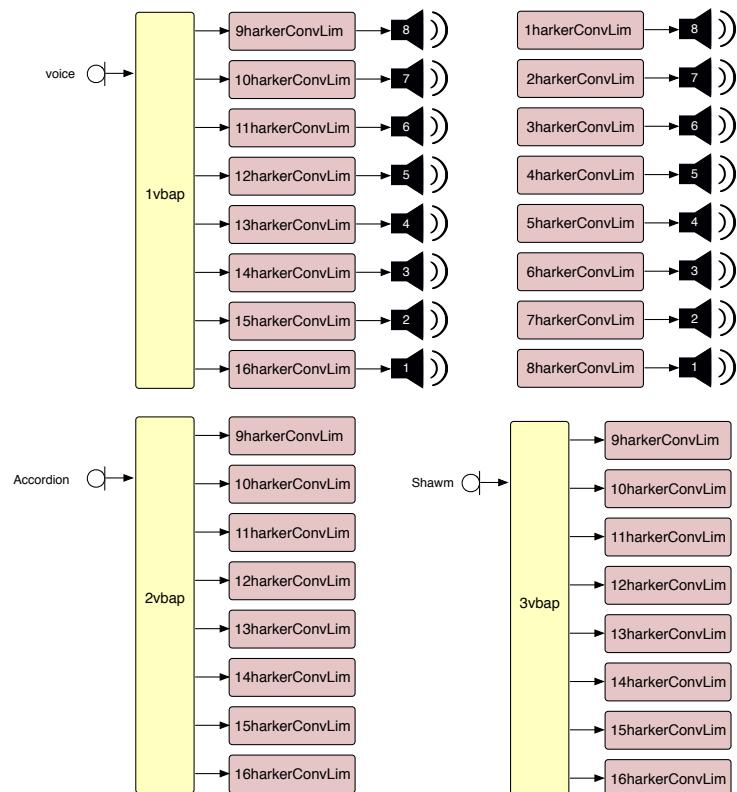
1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 1_Hamilton Mausoleum
 3harkerConv: model 1_Hamilton Mausoleum
 4harkerConv: model 2_NYC Sportcenter
 5harkerConv: model 2_NYC Sportcenter
 6harkerConv: model 2_NYC Sportcenter
 7harkerConv: model 3_Giant Basilica
 8harkerConv: model 3_Giant Basilica

All peak limiters at -10dB

azimuth1 is controlled by the pitch of the voice, scaling MIDI 61 70 to 1 360 degree
 spread1 is controlled by the timbre of the voice, scaling 0 10 to 2 360 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 61 70 to 181 540 degree
 spread2 is controlled by the timbre of the voice, scaling 0 10 to 2 360 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 61 70 to 181 540 degree
 spread3 is controlled by the timbre of the voice, scaling 0 10 to 2 360 degree

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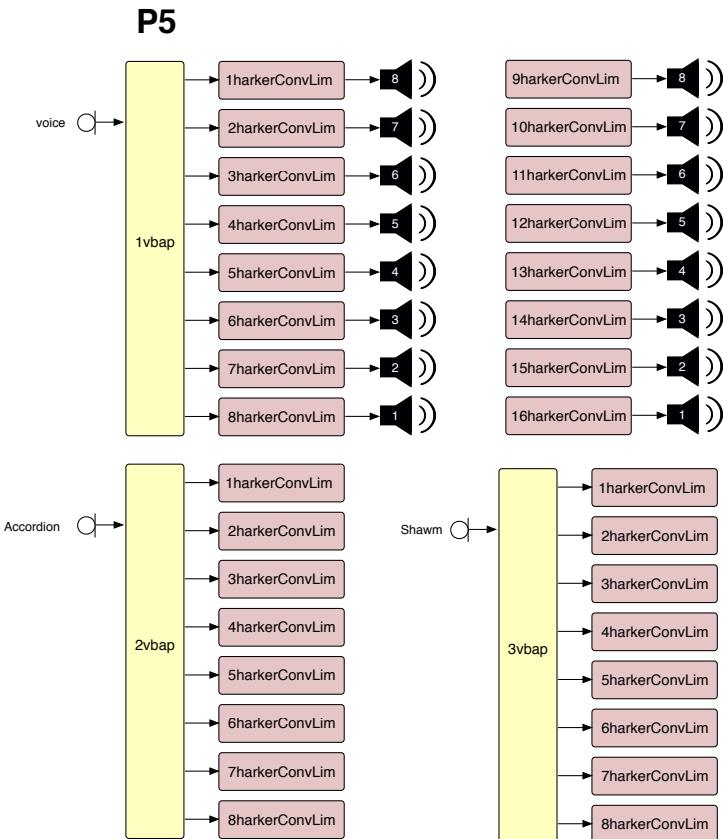
P4



1harkerConv: model_1_Hamilton Mausoleum
 2harkerConv: model_1_Hamilton Mausoleum
 3harkerConv: model_2_NYC Sportscenter
 4harkerConv: model_2_NYC Sportscenter
 5harkerConv: model_3_Giant Basilica
 6harkerConv: model_3_Giant Basilica
 7harkerConv: model_4_German Large Church
 8harkerConv: model_4_German Large Church

All peak limiters at -10dB

azimuth1 is controlled by the pitch of the voice, scaling MIDI 54 72 to 1 360 degree
 spread1 is controlled by the timbre of the voice, scaling 0 10 to 2 80 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 54 72 to 181 540 degree
 spread2 is controlled by the timbre of the voice, scaling 0 10 to 2 80 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 54 72 to 181 540 degree
 spread3 is controlled by the timbre of the voice, scaling 0 10 to 2 80 degree

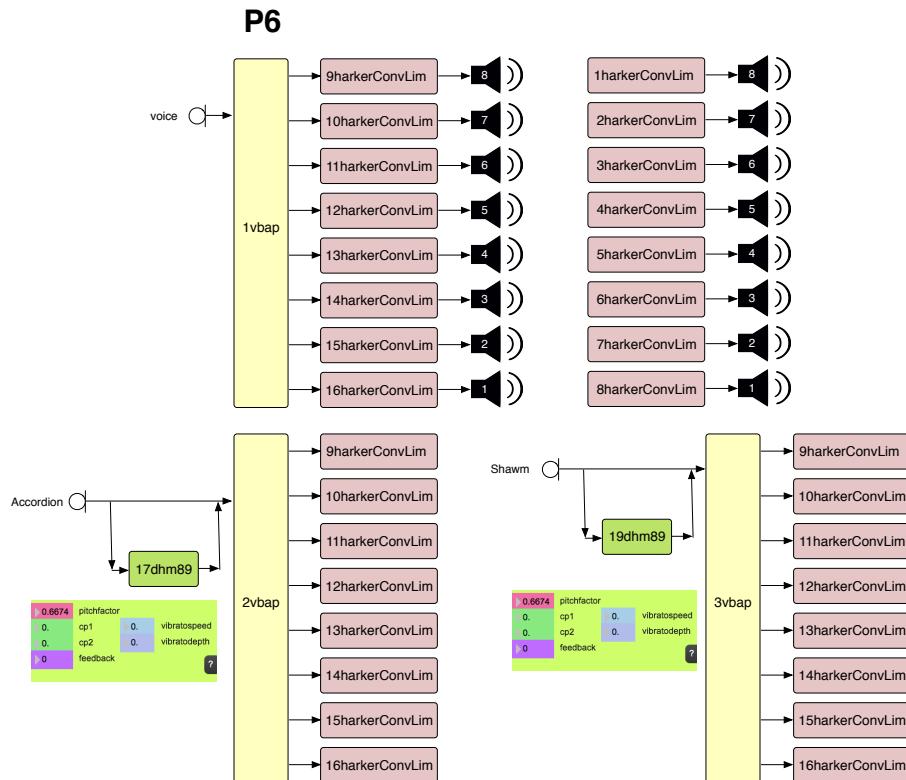


1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 1_Hamilton Mausoleum
 3harkerConv: model 2_NYC Sportscenter
 4harkerConv: model 2_NYC Sportscenter
 5harkerConv: model 3_Giant Basilica
 6harkerConv: model 3_Giant Basilica
 7harkerConv: model 4_German Large Church
 8harkerConv: model 4_German Large Church

All peak limiters at -10dB

azimuth1 is controlled by the pitch of the voice, scaling MIDI 61 63 to 1 360 degree
 spread1 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 61 63 to 181 540 degree
 spread2 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 61 63 to 181 540 degree
 spread3 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree

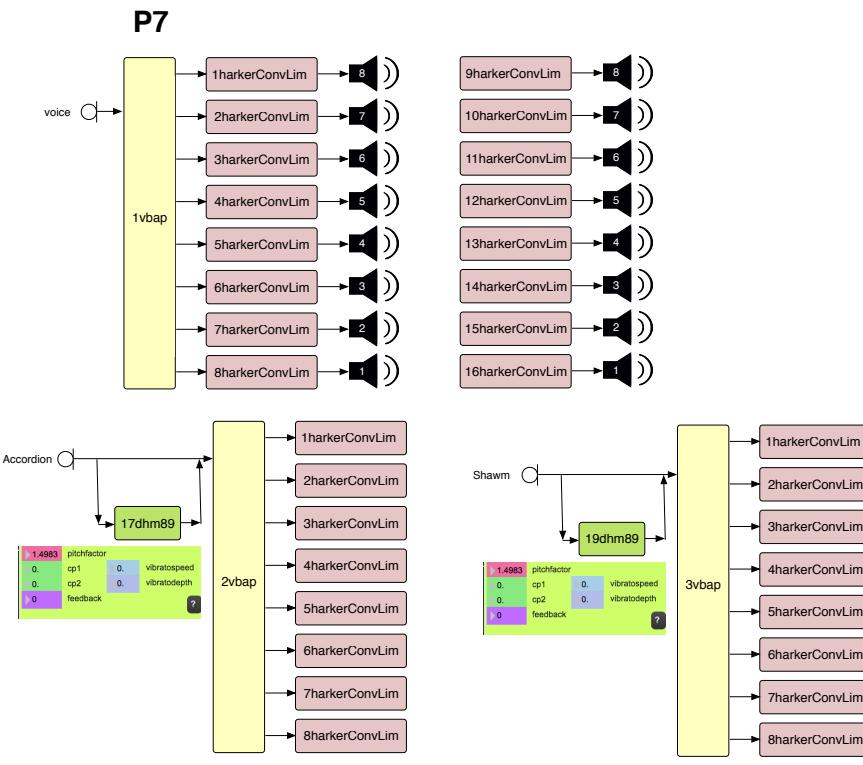
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1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 1_Hamilton Mausoleum
 3harkerConv: model 1_Hamilton Mausoleum
 4harkerConv: model 1_Hamilton Mausoleum
 5harkerConv: model 1_Hamilton Mausoleum
 6harkerConv: model 1_Hamilton Mausoleum
 7harkerConv: model 1_Hamilton Mausoleum
 8harkerConv: model 1_Hamilton Mausoleum

All peak limiters at -10dB
 The loudness (trim) of the dhms are controlled by the loudness of the shawm

azimuth1 is controlled by the pitch of the voice, scaling MIDI 66.5 74.5 to 0 360 degree
 spread1 is controlled by the timbre of the voice, scaling 0 10 to 2 45 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 66.5 74.5 to 180 540 degree
 spread2 is controlled by the timbre of the voice, scaling 0 10 to 2 45 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 66.5 74.5 to 180 540 degree
 spread3 is controlled by the timbre of the voice, scaling 0 10 to 2 45 degree

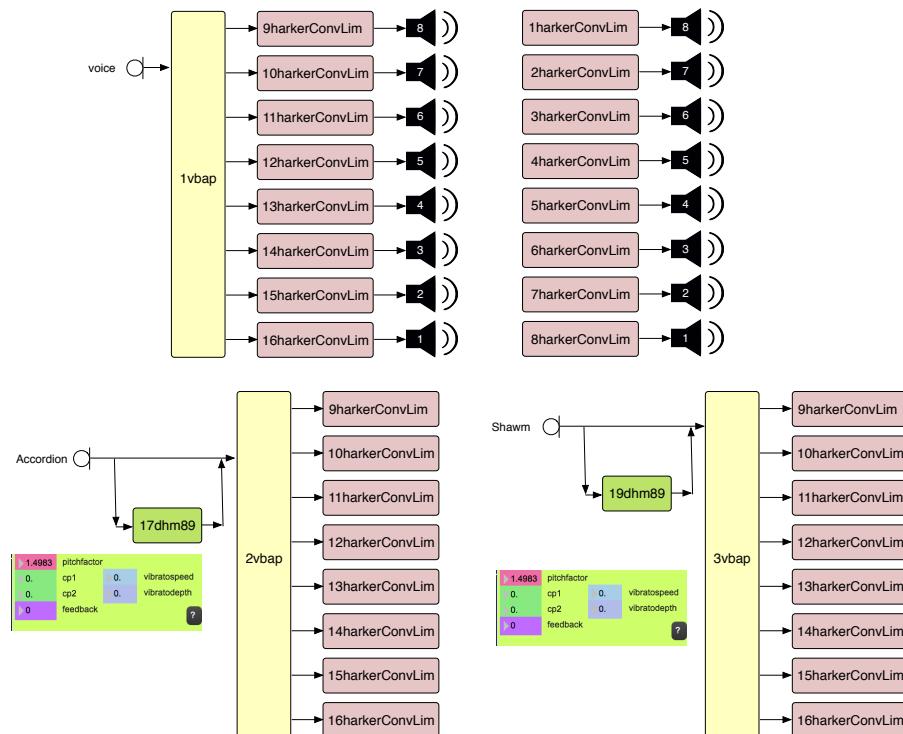


1harkerConv: model 1_Hamilton Mausoleum
2harkerConv: model 1_Hamilton Mausoleum
3harkerConv: model 1_Hamilton Mausoleum
4harkerConv: model 1_Hamilton Mausoleum
5harkerConv: model 2_NYC Sportscenter
6harkerConv: model 2_NYC Sportscenter
7harkerConv: model 2_NYC Sportscenter
8harkerConv: model 2_NYC Sportscenter

All peak limiters at -10dB
The loudness (trim) of the dhms are controlled by the loudness of the shawm

azimuth1 is controlled by the pitch of the voice, scaling MIDI 61 63 to 1 360 degree
spread1 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 61 63 to 181 540 degree
spread2 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 61 63 to 181 540 degree
spread3 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree

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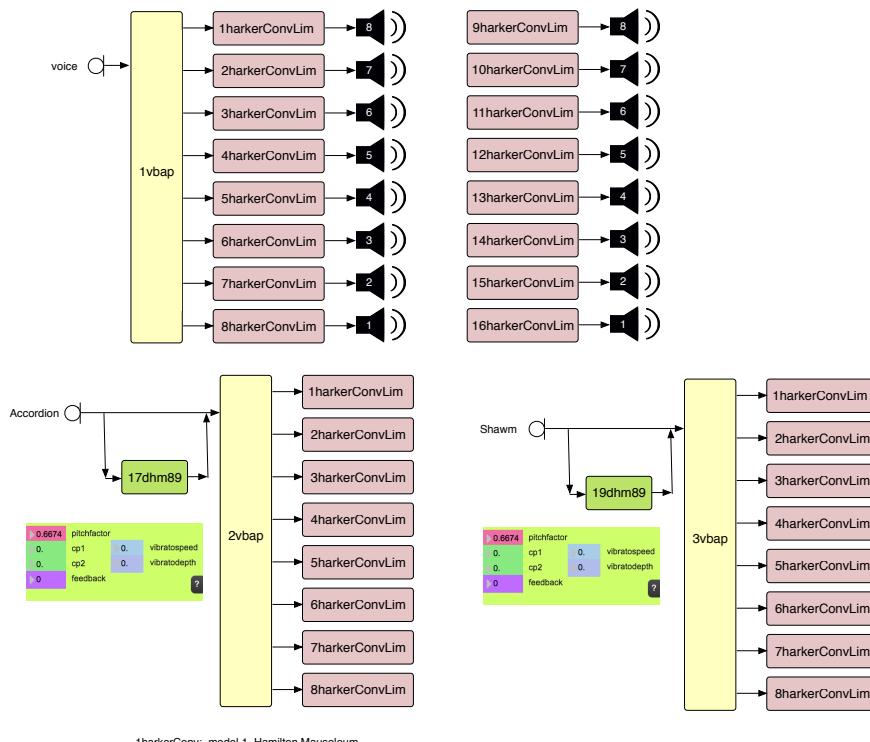


1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 1_Hamilton Mausoleum
 3harkerConv: model 2_NYC Sportcenter
 4harkerConv: model 2_NYC Sportcenter
 5harkerConv: model 3_Giant Basilica
 6harkerConv: model 3_Giant Basilica
 7harkerConv: model 4_German Large Church
 8harkerConv: model 4_German Large Church

All peak limiters at -10dB
 The loudness (trim) of the dhms are controlled by the loudness of the shawm

azimuth1 is controlled by the pitch of the voice, scaling MIDI 66.5 67.5 to 0 360 degree
 spread1 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 66.5 67.5 to 180 540 degree
 spread2 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 66.5 67.5 to 180 540 degree
 spread3 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree

P9



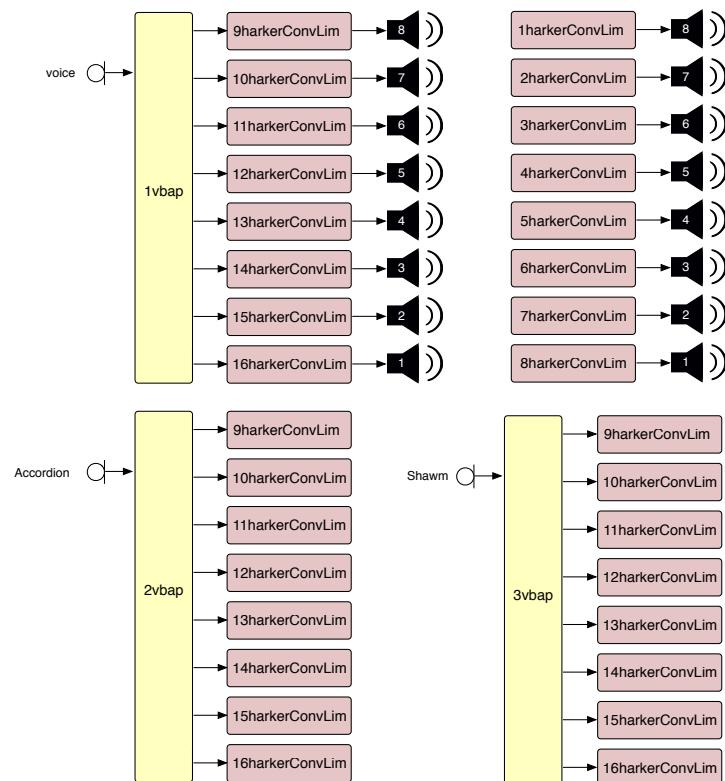
1harkerConv: model 1_Hamilton Mausoleum
2harkerConv: model 1_Hamilton Mausoleum
3harkerConv: model 1_Hamilton Mausoleum
4harkerConv: model 1_Hamilton Mausoleum
5harkerConv: model 2_NYC Sportscenter
6harkerConv: model 2_NYC Sportscenter
7harkerConv: model 2_NYC Sportscenter
8harkerConv: model 2_NYC Sportscenter

All peak limiters at -10dB

azimuth1 is controlled by the pitch of the voice, scaling MIDI 66.5 67.5 to 0 360 degree
spread1 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 66.5 67.5 to 180 540 degree
spread2 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 66.5 67.5 to 180 540 degree
spread3 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree

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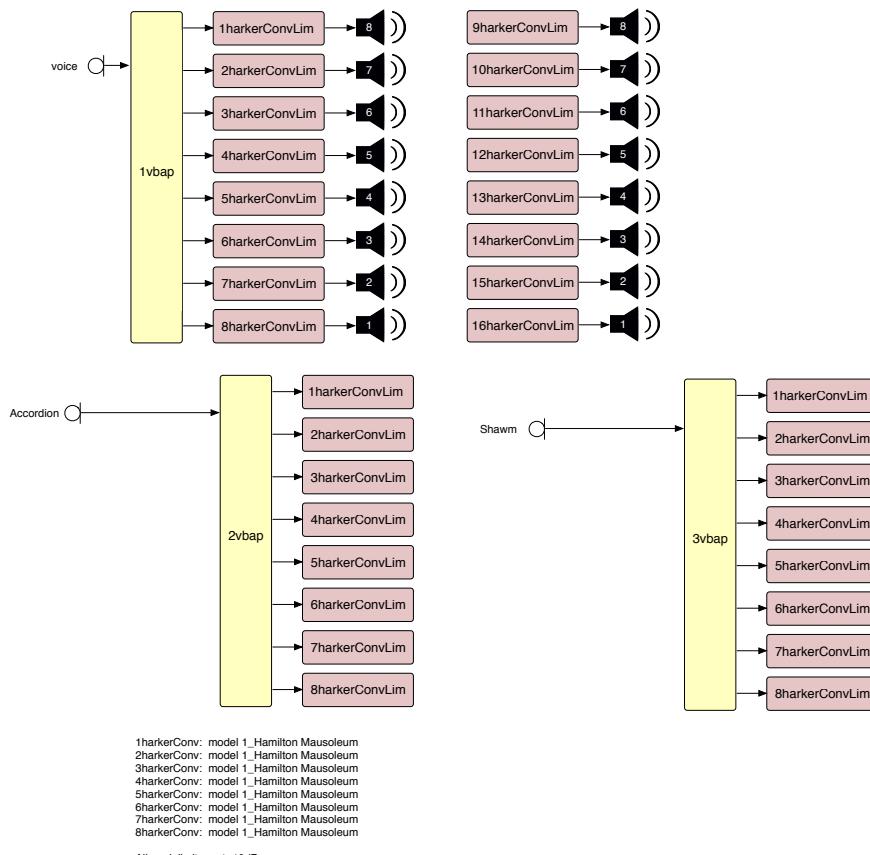


1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 1_Hamilton Mausoleum
 3harkerConv: model 1_Hamilton Mausoleum
 4harkerConv: model 1_Hamilton Mausoleum
 5harkerConv: model 2_NYC Sportscenter
 6harkerConv: model 2_NYC Sportscenter
 7harkerConv: model 2_NYC Sportscenter
 8harkerConv: model 2_NYC Sportscenter

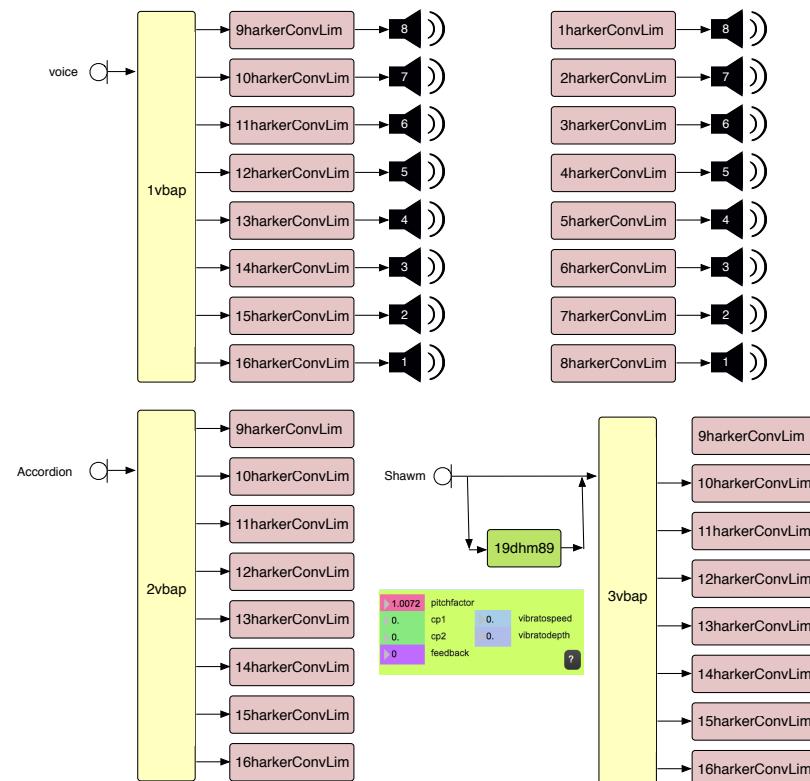
All peak limiters at -10dB

azimuth1 is controlled by the pitch of the voice, scaling MIDI 61.5 74.5 to 0 360 degree
 spread1 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 61.5 74.5 to 180 540 degree
 spread2 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 61.5 74.5 to 180 540 degree
 spread3 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree

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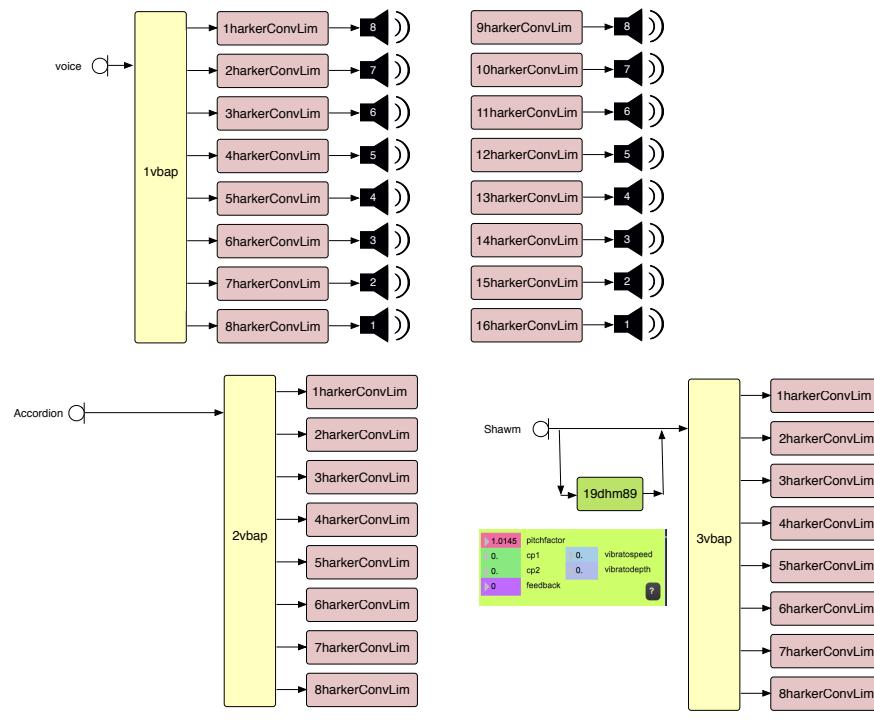


1harkerConv: model 5_German Concert Hall
 2harkerConv: model 5_German Concert Hall
 3harkerConv: model 5_German Concert Hall
 4harkerConv: model 5_German Concert Hall
 5harkerConv: model 6_BM7 Hall Small
 6harkerConv: model 6_BM7 Hall Small
 7harkerConv: model 6_BM7 Hall Small
 8harkerConv: model 6_BM7 Hall Small

All peak limiters at -10dB
 The loudness (trim) of the dhm is controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 60 120 to 0 90 degree;
 spread1 isControlledBy timbre1 scaling 0 10 to 2 45 degree;
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 60 120 to 180 270 degree;
 spread2 isControlledBy timbre1 scaling 0 10 to 2 45 degree;
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 60 120 to 180 270 degree;
 spread3 isControlledBy timbre1 scaling 0 10 to 2 45 degree;

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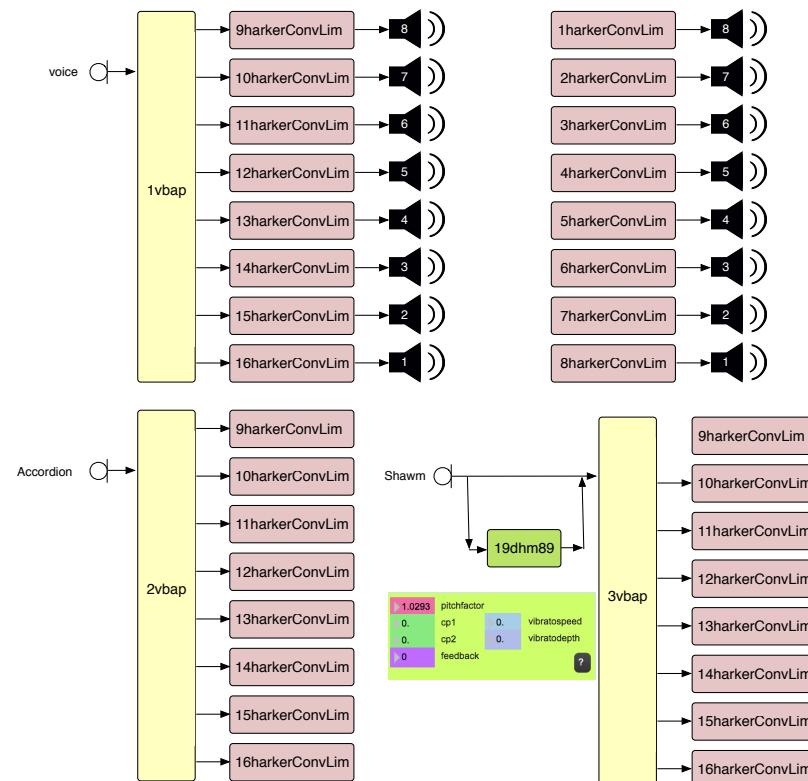


1harkerConv: model 5_German Concert Hall
2harkerConv: model 5_German Concert Hall
3harkerConv: model 5_German Concert Hall
4harkerConv: model 5_German Concert Hall
5harkerConv: model 6_BM7 Hall Small
6harkerConv: model 6_BM7 Hall Small
7harkerConv: model 7_BM7 Vocal Chamber
8harkerConv: model 7_BM7 Vocal Chamber

All peak limiters at -10dB
The loudness (trim) of the dhm is controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 60 120 to 0 225 degree;
spread1 isControlledBy timbre1 scaling 0 10 to 2 45 degree;
azimuth2 is controlled by the pitch of the voice, scaling MIDI 60 120 to 180 405 degree;
spread2 isControlledBy timbre1 scaling 0 10 to 2 45 degree;
azimuth3 is controlled by the pitch of the voice, scaling MIDI 60 120 to 180 405 degree;
spread3 isControlledBy timbre1 scaling 0 10 to 2 45 degree;

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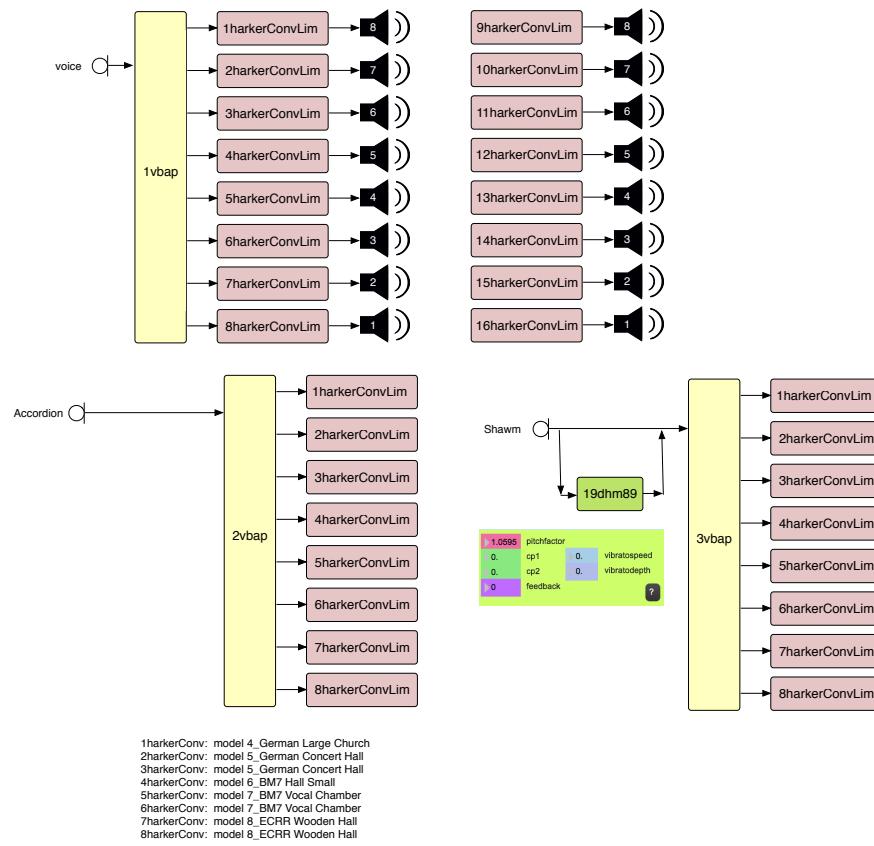


1harkerConv: model 5_German Concert Hall
 2harkerConv: model 5_German Concert Hall
 3harkerConv: model 6_BM7 Hall Small
 4harkerConv: model 6_BM7 Hall Small
 5harkerConv: model 7_BM7 Vocal Chamber
 6harkerConv: model 7_BM7 Vocal Chamber
 7harkerConv: model 8_ECRR Wooden Hall
 8harkerConv: model 8_ECRR Wooden Hall

All peak limiters at -10dB
 The loudness (trim) of the dhm is controlled by the loudness of the accordion

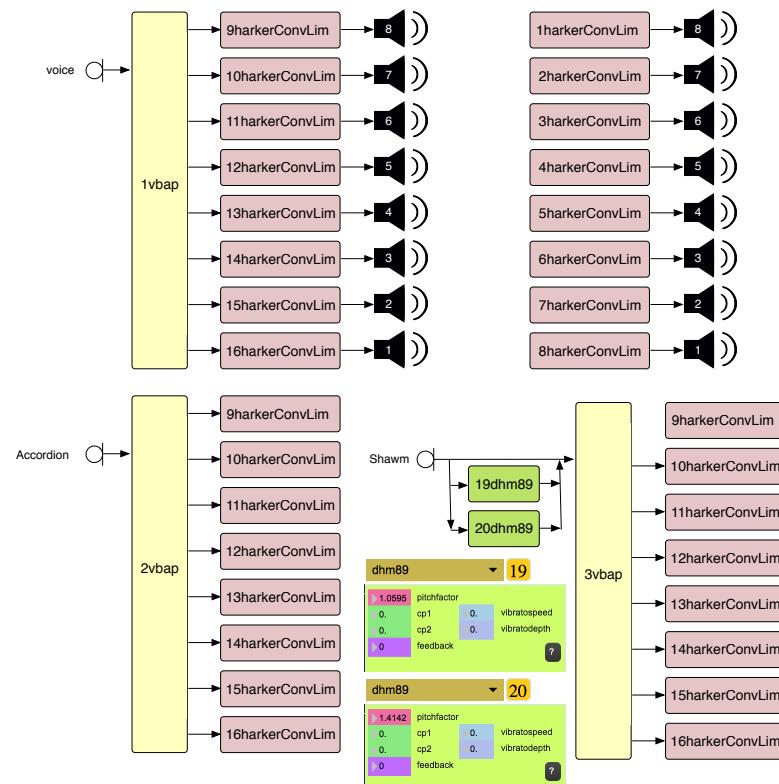
azimuth1 is controlled by the pitch of the voice, scaling MIDI 60 120 to 0 90 degree;
 spread1 isControlledBy timbre1 scaling 0 10 to 2 45 degree;
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 60 120 to 180 270 degree;
 spread2 isControlledBy timbre1 scaling 0 10 to 2 45 degree;
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 60 120 to 180 270 degree;
 spread3 isControlledBy timbre1 scaling 0 10 to 2 45 degree;

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azimuth1 is controlled by the pitch of the voice, scaling MIDI 53.5 56.5 to 0 315 degree;
 spread1 isControlledBy timbre1 scaling 0 10 to 2 135 degree;
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 53.5 56.5 to 180 495 degree;
 spread2 isControlledBy timbre1 scaling 0 10 to 2 135 degree;
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 53.5 56.5 to 180 495 degree;
 spread3 isControlledBy timbre1 scaling 0 10 to 2 135 degree;

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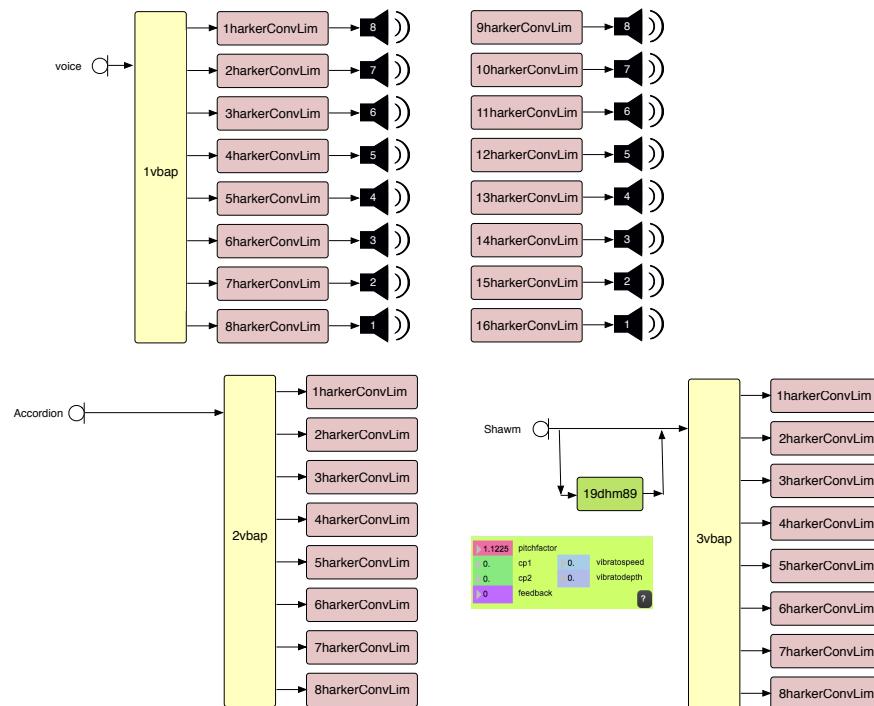
1harkerConv: model_3_Giant Basilica
2harkerConv: model_4_German Large Church
3harkerConv: model_5_German Concert Hall
4harkerConv: model_5_German Concert Hall
5harkerConv: model_6_BM7 Hall Small
6harkerConv: model_6_BM7 Hall Small
7harkerConv: model_8_ECRR Wooden Hall
8harkerConv: model_8_ECRR Wooden Hall

All peak limiters at -10dB
The loudness (trim) of the dhms are controlled by the loudness of the accordion

```
azimuth1 is controlled by the pitch of the voice, scaling MIDI 60.5 69.5 to 0 360 degree;
spread1 isControlledBy timbre1 scaling 0 10 to 2 90 degree;
azimuth2 is controlled by the pitch of the voice, scaling MIDI 60.5 69.5 to 180 540 degree;
spread2 isControlledBy timbre1 scaling 0 10 to 2 90 degree;
azimuth3 is controlled by the pitch of the voice, scaling MIDI 60.5 69.5 to 180 540 degree;
spread3 isControlledBy timbre1 scaling 0 10 to 2 90 degree;
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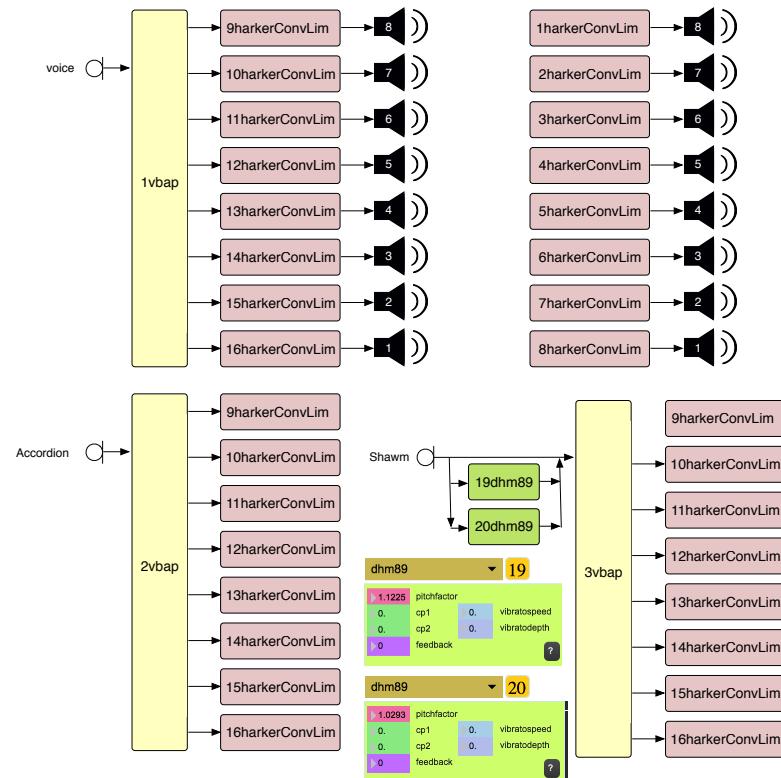
1harkerConv: model 3_Giant Basilica
2harkerConv: model 4_German Large Church
3harkerConv: model 5_German Concert Hall
4harkerConv: model 5_German Concert Hall
5harkerConv: model 6_BM7 Hall Small
6harkerConv: model 6_BM7 Hall Small
7harkerConv: model 8_ECCR Wooden Hall
8harkerConv: model 8_ECCR Wooden Hall

All peak limiters at -10dB
The loudness (trim) of the dhms are controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 60.5 69.5 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 2 90 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 60.5 69.5 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 2 90 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 60.5 69.5 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 2 90 degree

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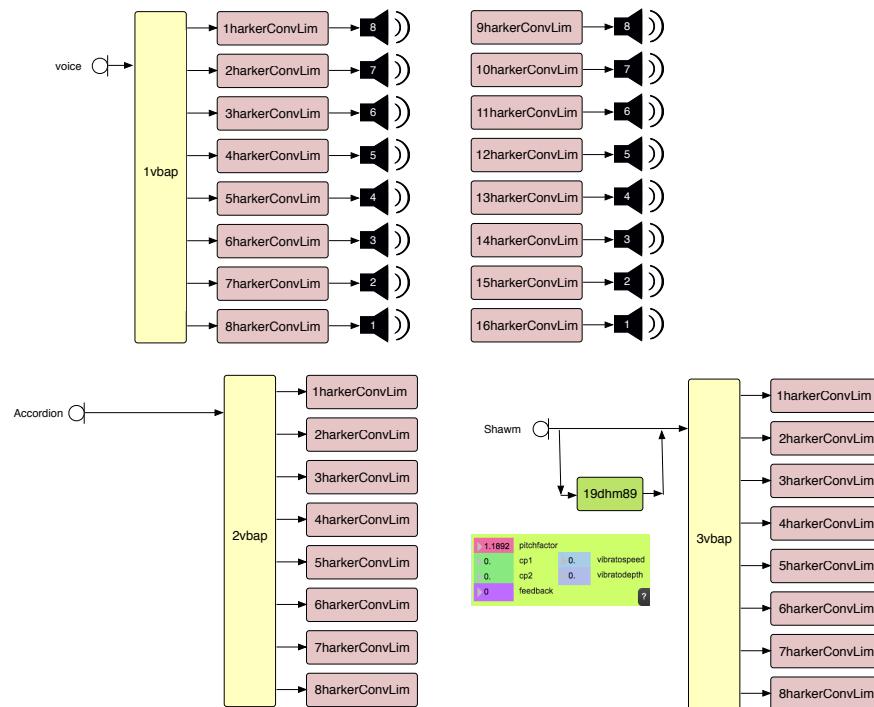


1harkerConv: model_2_NYC Sportscenter
 2harkerConv: model_4_German Large Church
 3harkerConv: model_4_German Large Church
 4harkerConv: model_5_German Concert Hall
 5harkerConv: model_5_German Concert Hall
 6harkerConv: model_6_BM7 Hall Small
 7harkerConv: model_7_BM7 Vocal Chamber
 8harkerConv: model_8_ECRR Wooden Hall

All peak limiters at -10dB
 The loudness (trim) of the dhms are controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 60.5 71.5 to 0 360 degree
 spread1 isControlledBy timbre1 scaling 0 10 to 2 45 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 60.5 71.5 to 180 540 degree
 spread2 isControlledBy timbre1 scaling 0 10 to 2 45 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 60.5 71.5 to 180 540 degree
 spread3 isControlledBy timbre1 scaling 0 10 to 2 45 degree

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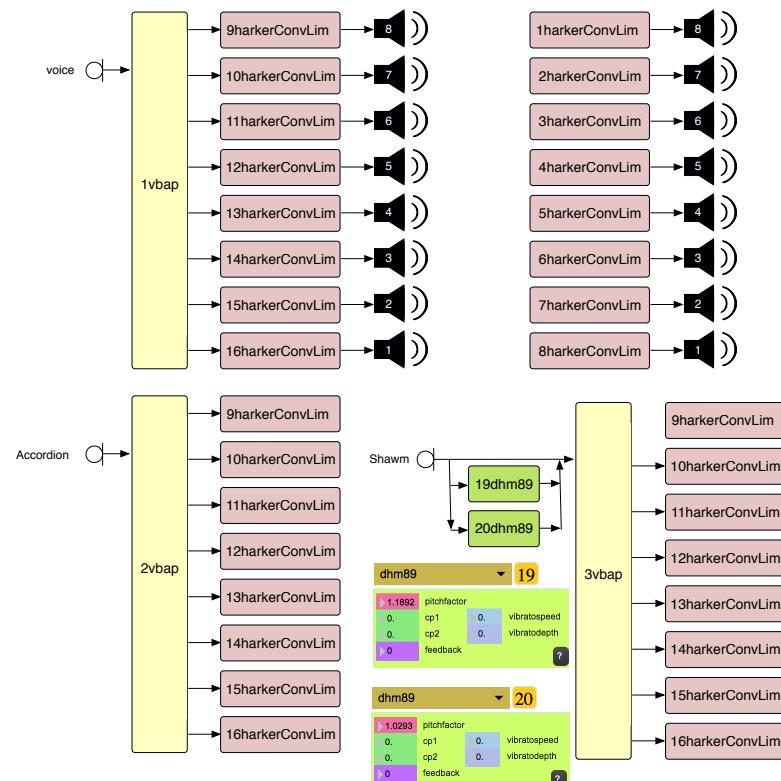
1harkerConv: model 1_Hamilton Mausoleum
2harkerConv: model 2_NYC Specconter
3harkerConv: model 3_BM7 Vocal Chamber
4harkerConv: model 4_German Large Church
5harkerConv: model 5_German Concert Hall
6harkerConv: model 6_BM7 Hall Small
7harkerConv: model 7_BM7 Vocal Chamber
8harkerConv: model 7_BM7 Vocal Chamber

All peak limiters at -10dB
The loudness (trim) of the dhms are controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 65.5 120 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 90 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 65.5 120 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 90 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 65.5 120 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 90 degree

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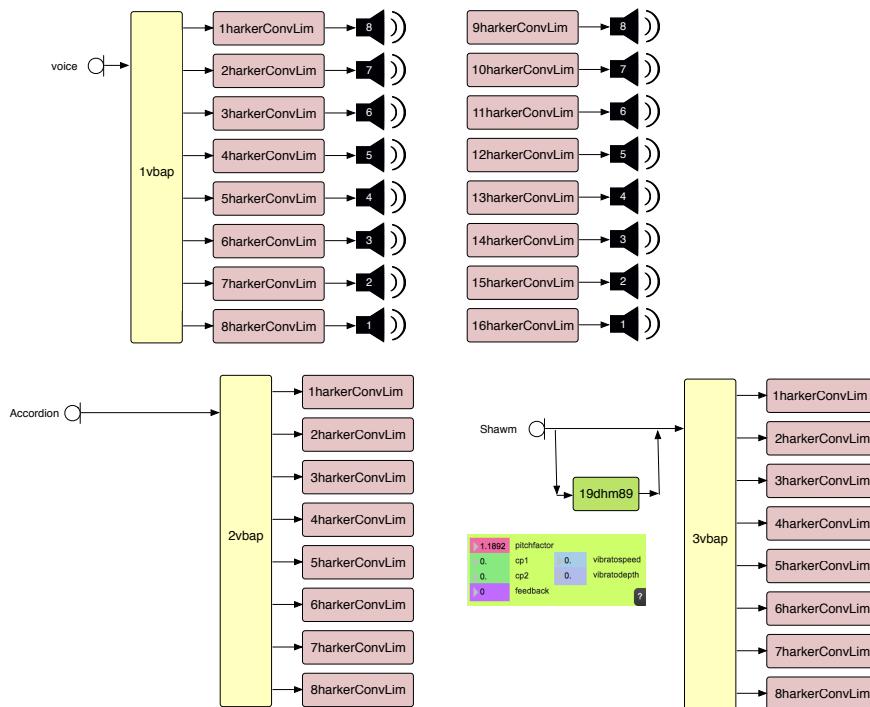


1harkerConv: model 1_Hamilton Mausoleum
2harkerConv: model 2_NYC Sportcenter
3harkerConv: model 3_Giant Basilica
4harkerConv: model 4_German Large Church
5harkerConv: model 5_German Concert Hall
6harkerConv: model 6_BM7 Hall Small
7harkerConv: model 7_BM7 Vocal Chamber
8harkerConv: model 8_ECRR Wooden Hall

All peak limiters at -10dB
The loudness (trim) of the dhms are controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 65.5 120 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 135 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 65.5 120 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 135 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 65.5 120 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 135 degree

P21

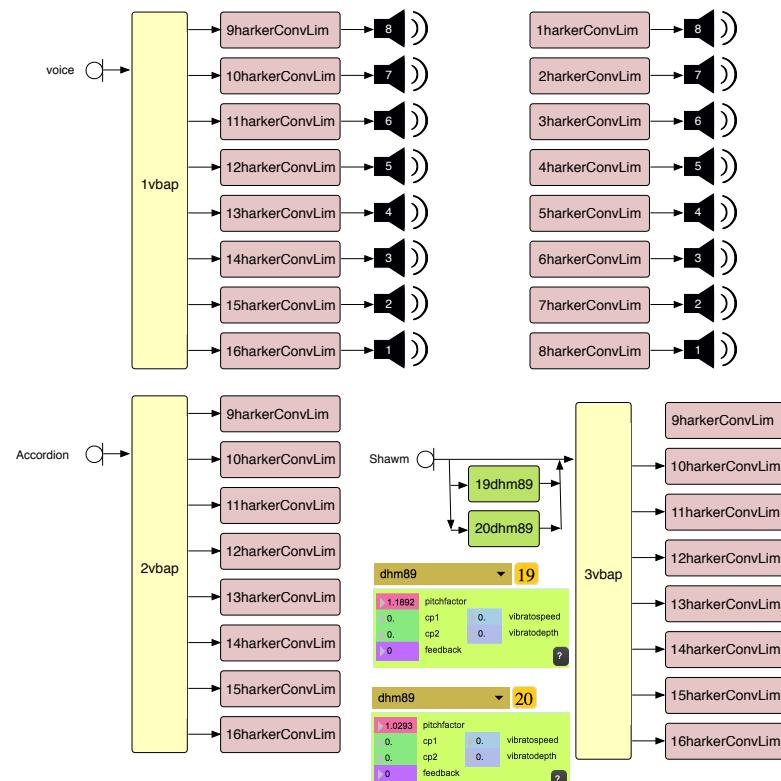


HarkerConv: model 1_Humilius Mausoleum
2HarkerConv: model 2_NYC Symphontre
3HarkerConv: model 3_Giant Basilica
4HarkerConv: model 4_German Large Church
5HarkerConv: model 5_German Concert Hall
6HarkerConv: model 6_BM7 Hall Small
7HarkerConv: model 7_BM7 Vocal Chamber
8HarkerConv: model 8_ECCR Wooden Hall

All peak limiters at -10dB
The loudness (trim) of the dhms are controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 62.5 75.5 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 180 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 62.5 75.5 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 180 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 62.5 75.5 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 180 degree

P22

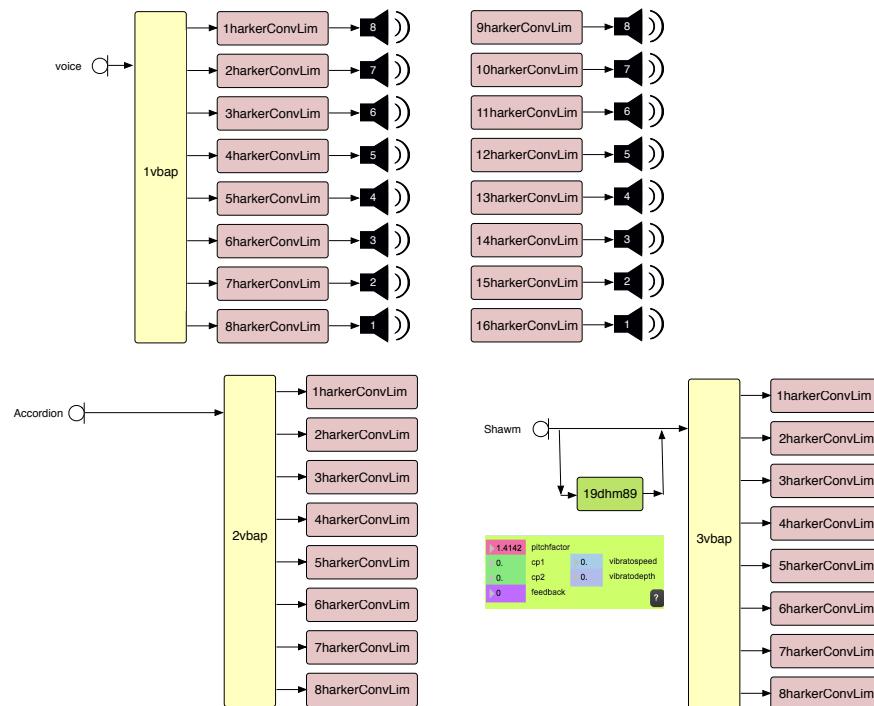


1harkerConv: model 1_Hamilton Mausoleum
2harkerConv: model 1_Hamilton Mausoleum
3harkerConv: model 2_NYC Sportcenter
4harkerConv: model 3_Giant Ballista
5harkerConv: model 5_German Concert Hall
6harkerConv: model 5_German Concert Hall
7harkerConv: model 6_BM7 Hall Small
8harkerConv: model 6_BM7 Hall Small

All peak limiters at -10dB
The loudness (trim) of the dhms are controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 45.5 to 74.5 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 180 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 45.5 74.5 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 180 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 45.5 74.5 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 180 degree

P23



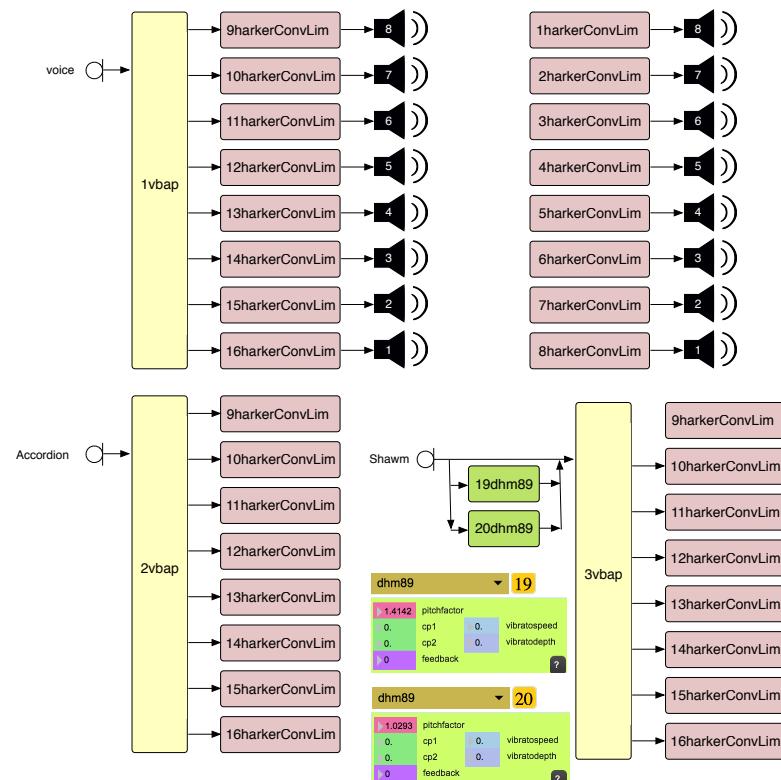
1harkerConvLim: model 1_Hamilton Mausoleum
 2harkerConvLim: model 1_Hamilton Mausoleum
 3harkerConvLim: model 2_NYC Sportscenter
 4harkerConvLim: model 2_NYC Sportscenter
 5harkerConvLim: model 3_Giant Basilica
 6harkerConvLim: model 4_German Large Church
 7harkerConvLim: model 5_German Concert Hall
 8harkerConvLim: model 6_BM7 Hall Small

All peak limiters at -10dB
 The loudness (trim) of the dhms are controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 45.5 74.5 0 360 degree
 spread1 isControlledBy timbre1 scaling 0 10 2 135 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 45.5 74.5 180 540 degree
 spread2 isControlledBy timbre1 scaling 0 10 2 135 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 45.5 74.5 180 540 degree
 spread3 isControlledBy timbre1 scaling 0 10 2 135 degree

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P24

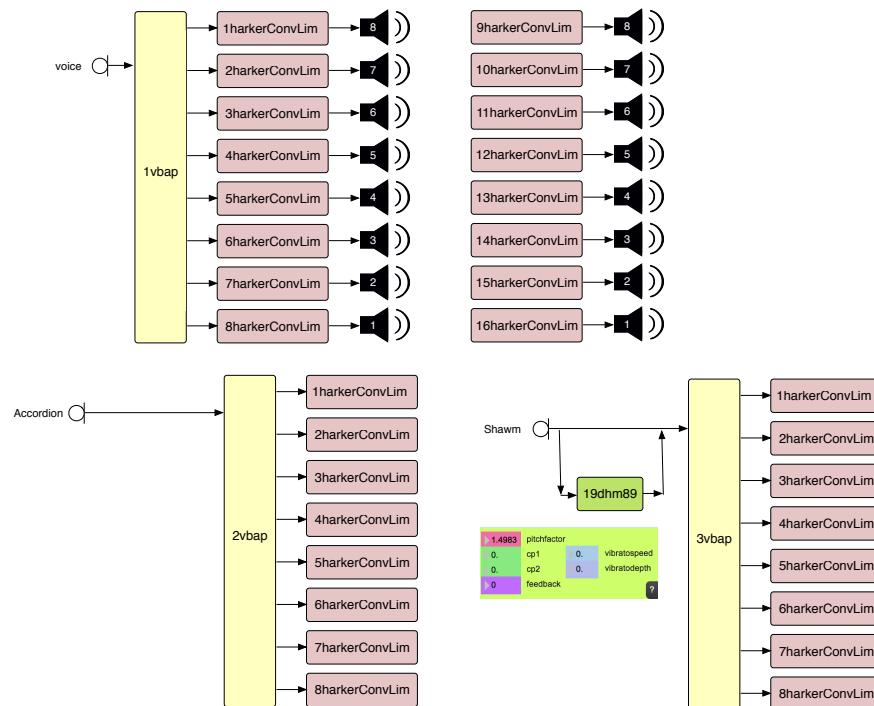


1harkerConv: model_1_Hamilton Mausoleum
2harkerConv: model_1_Hamilton Mausoleum
3harkerConv: model_2_NYC Sportcenter
4harkerConv: model_2_NYC Sportcenter
5harkerConv: model_3_Giant Basilica
6harkerConv: model_4_German Large Church
7harkerConv: model_4_German Large Church
8harkerConv: model_4_German Large Church

All peak limiters at -10dB
The loudness (lrm) of the dhms are controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 59.5 72.5 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 45 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 59.5 72.5 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 45 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 59.5 72.5 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 45 degree

P25



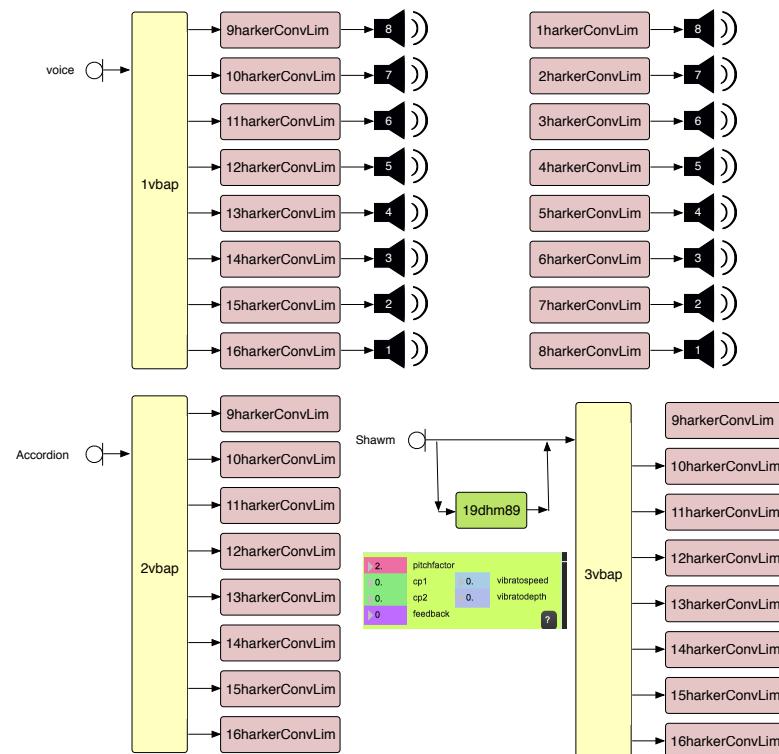
1harkerConv: model 1, Hamilton Mausoleum
 2harkerConv: model 1, Hamilton Mausoleum
 3harkerConv: model 2, NYC Sportscenter
 4harkerConv: model 2, NYC Sportscenter
 5harkerConv: model 3, Giant Basilica
 6harkerConv: model 4, German Large Church
 7harkerConv: model 4, German Large Church
 8harkerConv: model 4, German Large Church

All peak limiters at -10dB
 The loudness (trim) of the dhm is controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 60 120 to 0 360 degree
 spread1 isControlledBy timbre1 scaling 0 10 to 2 45 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 60 120 to 180 540 degree
 spread2 isControlledBy timbre1 scaling 0 10 to 2 45 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 60 120 to 180 540 degree
 spread3 isControlledBy timbre1 scaling 0 10 to 2 45 degree

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P26

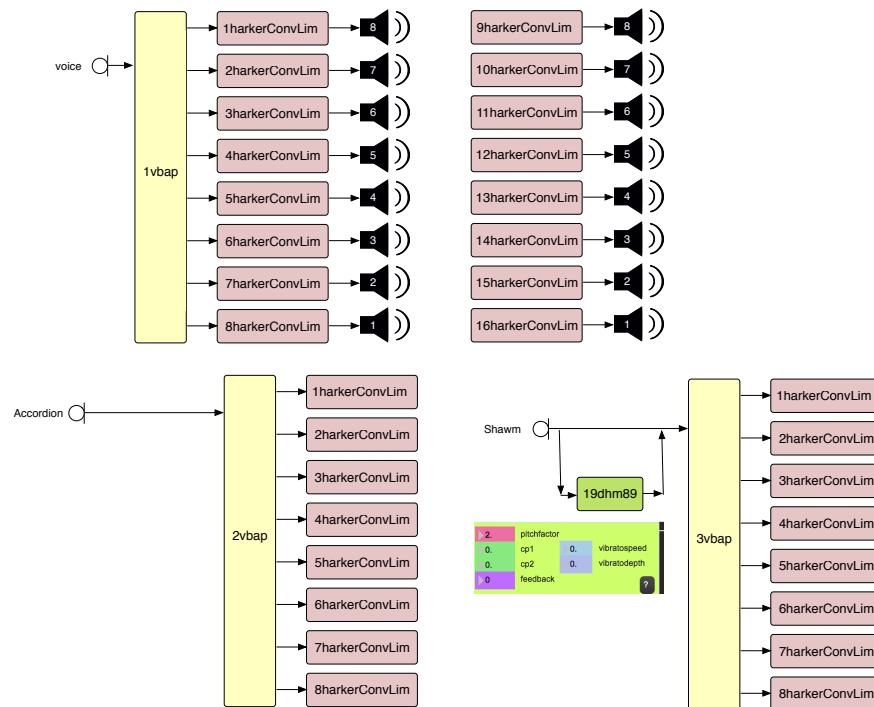


1harkerConv: model 1_Hamilton Mausoleum
2harkerConv: model 1_Hamilton Mausoleum
3harkerConv: model 2_NYC Sportcenter
4harkerConv: model 2_NYC Sportcenter
5harkerConv: model 3_Giant Basilica
6harkerConv: model 4_German Large Church
7harkerConv: model 4_German Large Church
8harkerConv: model 4_German Large Church

All peak limiters at -10dB
The loudness (lrm) of the dhms are controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 59.5 72.5 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 45 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 59.5 72.5 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 45 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 59.5 72.5 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 45 degree

P27

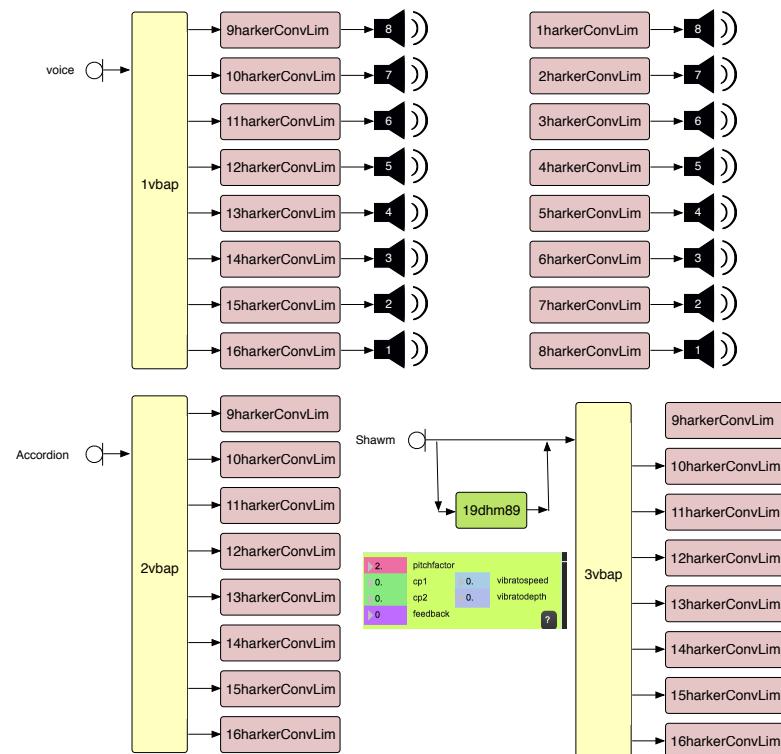


1harkerConv: model 8_ECPF Wooden Hall
 2harkerConv: model 6_BM7 Vocal Chamber
 3harkerConv: model 5_German Concert Hall
 4harkerConv: model 4_German Large Church
 6harkerConv: model 3_Giant Basilica
 7harkerConv: model 2_NYC Sportscenter
 8harkerConv: model 1_Hamilton Mausoleum

All peak limiters at -10dB
 The loudness (trim) of the dhm is controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 59.5 74.5 to 0 360 degree
 spread1 isControlledBy timbre1 scaling 0 10 to 2 180 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 59.5 74.5 to 180 540 degree
 spread2 isControlledBy timbre1 scaling 0 10 to 2 180 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 59.5 74.5 to 180 540 degree
 spread3 isControlledBy timbre1 scaling 0 10 to 2 180 degree

P28

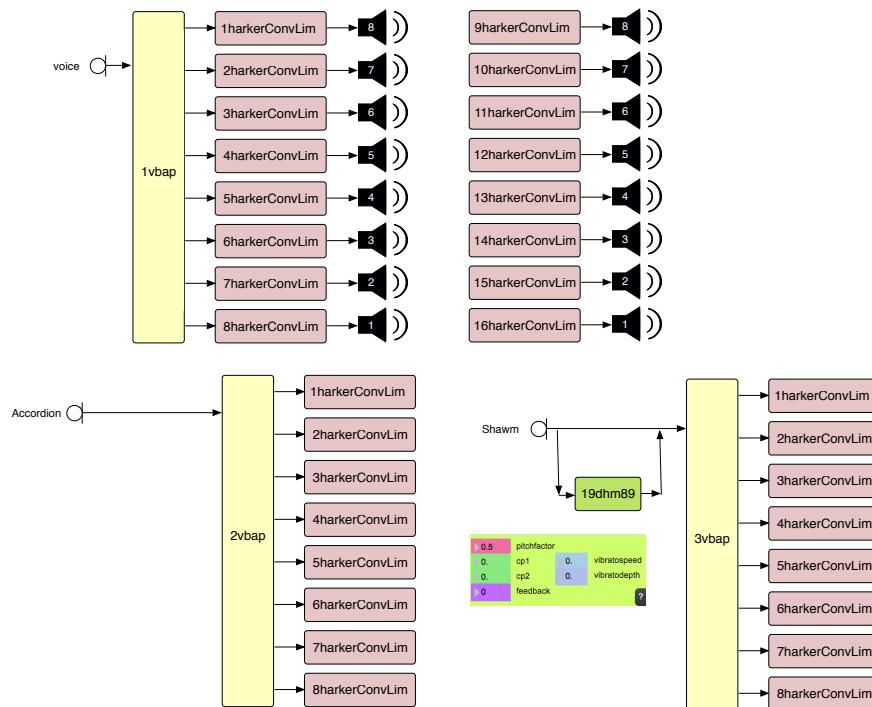


1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 2_NYC Sportcenter
 3harkerConv: model 3_Giant Basilica
 4harkerConv: model 4_German Large Church
 5harkerConv: model 5_German Concert Hall
 6harkerConv: model 6_BM7 Hall Small
 7harkerConv: model 7_BM7 Vocal Chamber
 8harkerConv: model 8_ECRR Wooden Hall

All peak limiters at -10dB
 The loudness (trim) of the dhms are controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 59.5 74.5 to 0 360 degree
 spread1 isControlledBy timbre1 scaling 0 10 to 2 180 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 59.5 74.5 to 180 540 degree
 spread2 isControlledBy timbre1 scaling 0 10 to 2 180 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 59.5 74.5 to 180 540 degree
 spread3 isControlledBy timbre1 scaling 0 10 to 2 180 degree

P29

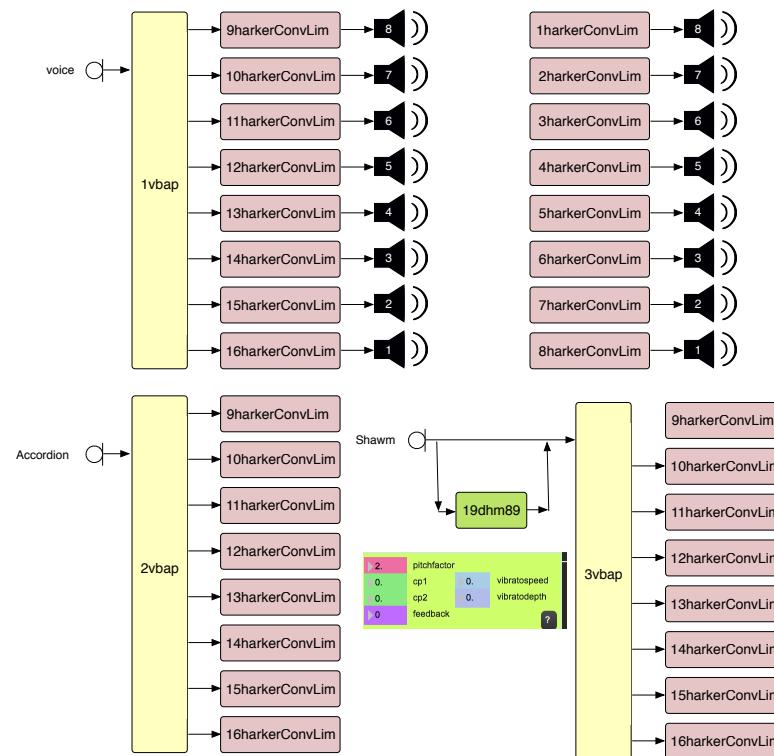


HarkerConv: model 8_ECPF Wooden Hall
2harkerConv: model 8_BM7 Vocal Chamber
3harkerConv: model 6_BM7 Hall Small
4harkerConv: model 5_German Concert Hall
5harkerConv: model 4_German Large Church
6harkerConv: model 3_Giant Basilica
7harkerConv: model 2_NYC Sportscenter
8harkerConv: model 1_Hamilton Mausoleum

All peak limiters at -10dB
The loudness (trim) of the dhm is controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 59.5 74.5 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 180 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 59.5 74.5 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 180 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 59.5 74.5 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 180 degree

P30

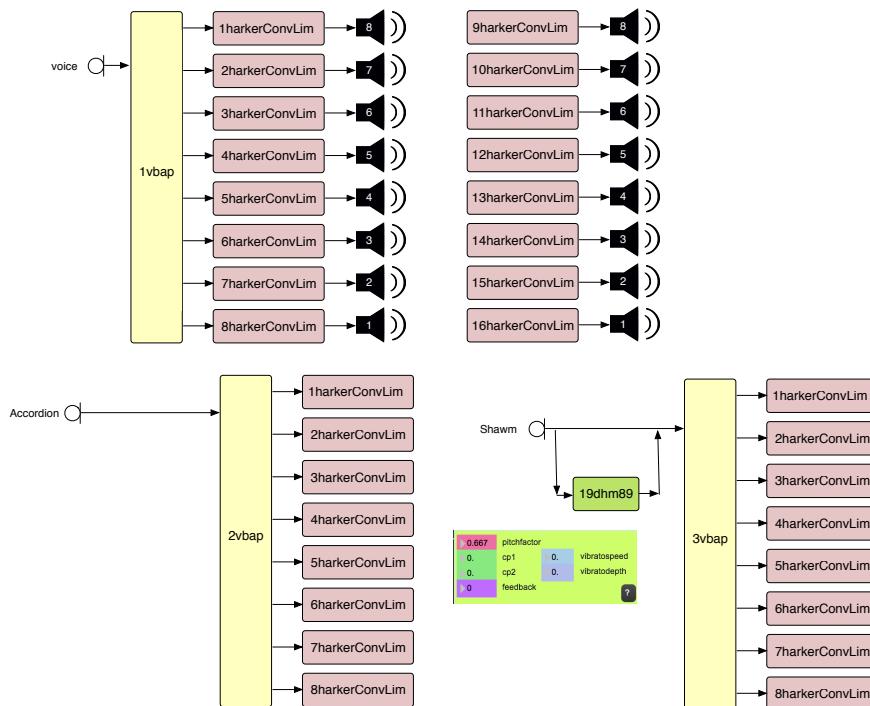


1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 2_NYC Sportcenter
 3harkerConv: model 3_Giant Basilica
 4harkerConv: model 4_German Large Church
 5harkerConv: model 5_German Concert Hall
 6harkerConv: model 6_BM7 Hall Small
 7harkerConv: model 7_BM7 Vocal Chamber
 8harkerConv: model 8_ECRR Wooden Hall

All peak limiters at -10dB
 The loudness (trim) of the dhms are controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 59.5 74.5 to 0 360 degree
 spread1 isControlledBy timbre1 scaling 0 10 to 2 180 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 59.5 74.5 to 180 540 degree
 spread2 isControlledBy timbre1 scaling 0 10 to 2 180 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 59.5 74.5 to 180 540 degree
 spread3 isControlledBy timbre1 scaling 0 10 to 2 180 degree

P31

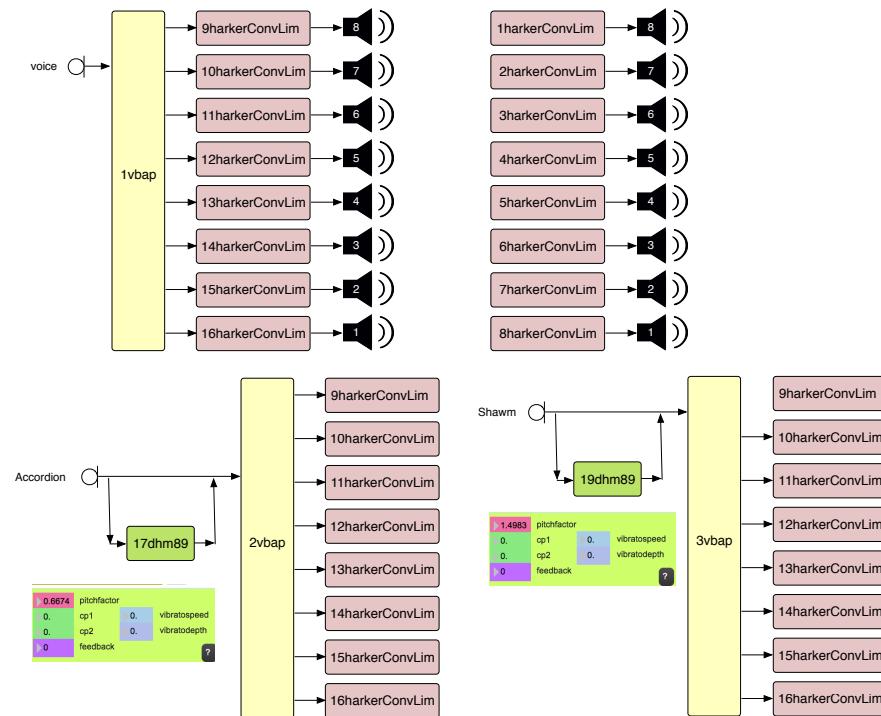


1harkerConv: model 1_Hamilton Mausoleum
2harkerConv: model 2_NYC Specconter
3harkerConv: model 3_Bethel Bellringing
4harkerConv: model 4_German Large Church
5harkerConv: model 5_German Concert Hall
6harkerConv: model 6_BM7 Hall Small
7harkerConv: model 7_BM7 Vocal Chamber
8harkerConv: model 8_ECCR Wooden Hall

All peak limiters at -10dB
The loudness (trim) of the dhms are controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 56.5 63.5 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 30 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 56.5 63.5 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 30 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 56.5 63.5 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 30 degree

P32



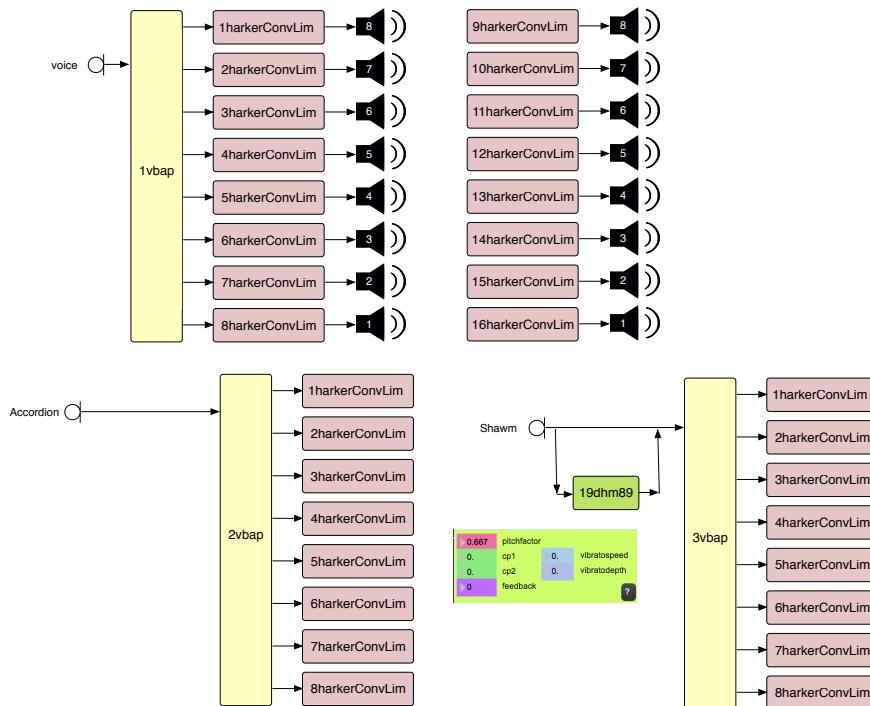
1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 2_NYC Sportscenter
 3harkerConv: model 3_Giant Basilica
 4harkerConv: model 4_German Large Church
 5harkerConv: model 5_German Concert Hall
 6harkerConv: model 6_BMT Hall Small
 7harkerConv: model 7_BMT Vocal Chamber
 8harkerConv: model 8_ECCR Wooden Hall

All peak limiters at -10dB
 The loudness (trim) of the dhms are controlled by the loudness of the accordion

```

azimuth1 is controlled by the pitch of the voice, scaling MIDI 56.5 63.5 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 15 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 56.5 63.5 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 15 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 56.5 63.5 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 15 degree
    
```

P33

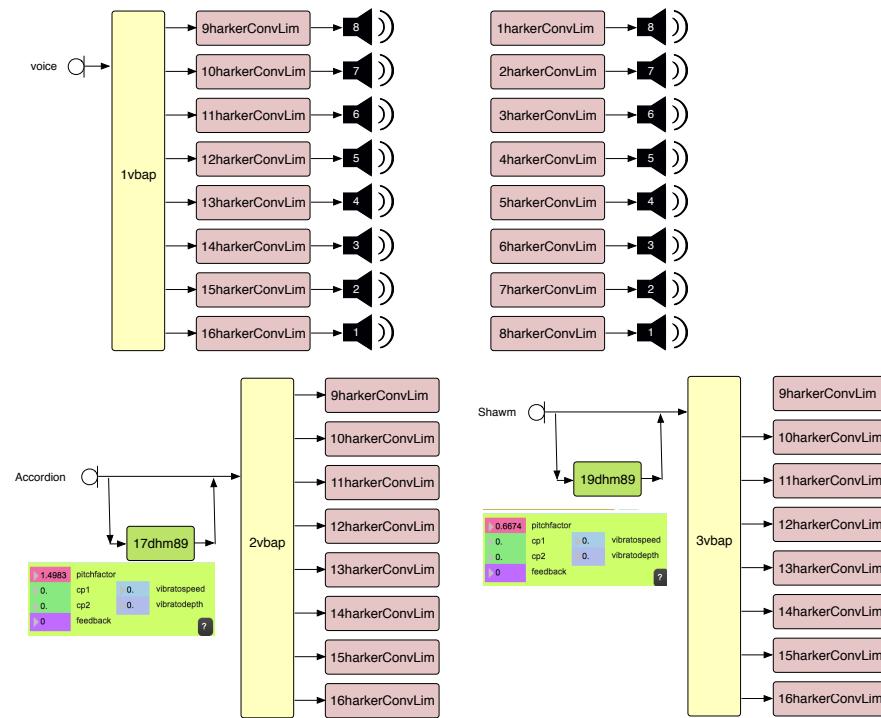


1harkerConv: model 1_Hamilton Mausoleum
2harkerConv: model 2_NYC Specconter
3harkerConv: model 3_Swiss Hall
4harkerConv: model 4_German Large Church
5harkerConv: model 5_German Concert Hall
6harkerConv: model 6_BM7 Hall Small
7harkerConv: model 7_BM7 Vocal Chamber
8harkerConv: model 8_ECCR Wooden Hall

All peak limiters at -10dB
The loudness (trim) of the dhms are controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 67.5 69.5 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 30 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 67.5 69.5 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 30 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 67.5 69.5 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 30 degree

P34



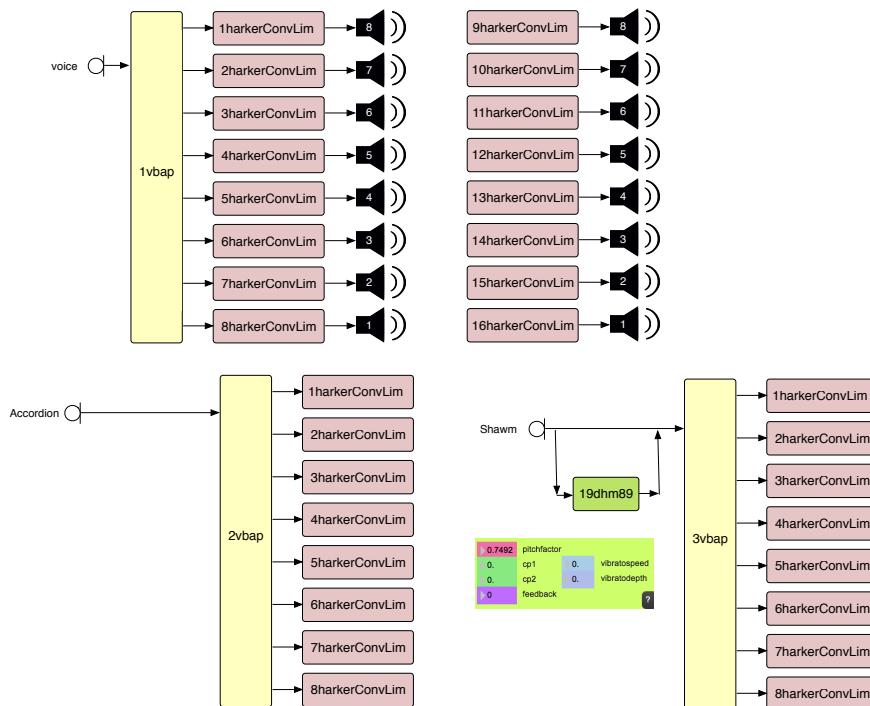
1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 2_NYC Sportscenter
 3harkerConv: model 3_Giant Basilica
 4harkerConv: model 4_German Large Church
 5harkerConv: model 5_German Concert Hall
 6harkerConv: model 6_BM7 Hall Small
 7harkerConv: model 7_BM7 Vocal Chamber
 8harkerConv: model 8_ECCR Wooden Hall

All peak limiters at -10dB
 The loudness (trim) of the dhms are controlled by the loudness of the accordion

```

azimuth1 is controlled by the pitch of the voice, scaling MIDI 54.5 63.5 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 15 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 54.5 63.5 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 15 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 54.5 63.5 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 15 degree
    
```

P35

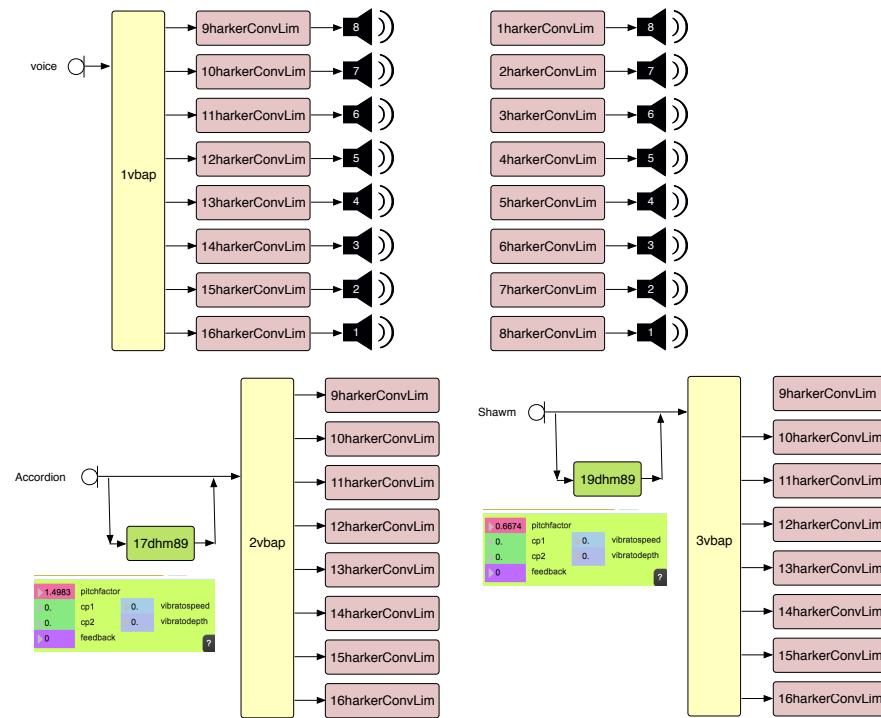


1harkerConv: model 1_Hamilton Mausoleum
2harkerConv: model 2_NYC Specconter
3harkerConv: model 3_Swiss Hall
4harkerConv: model 4_German Large Church
5harkerConv: model 5_German Concert Hall
6harkerConv: model 6_BM7 Hall Small
7harkerConv: model 7_BM7 Vocal Chamber
8harkerConv: model 8_ECCR Wooden Hall

All peak limiters at -10dB
The loudness (trim) of the dhms are controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 55.5 69.5 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 30 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 55.5 69.5 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 30 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 55.5 69.5 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 30 degree

P36

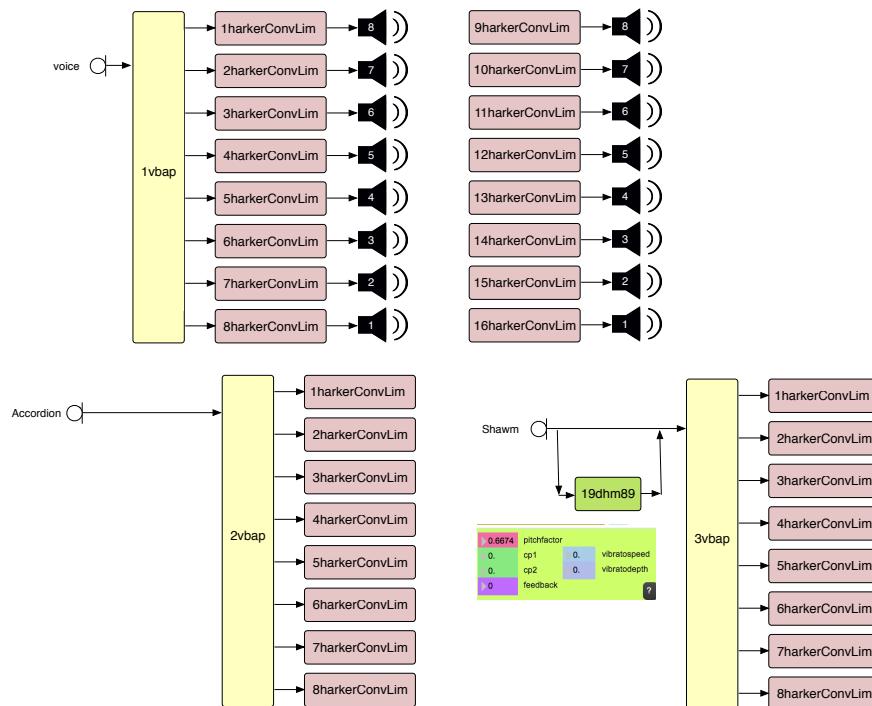


1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 2_NYC Sportscenter
 3harkerConv: model 3_Giant Basilica
 4harkerConv: model 4_German Large Church
 5harkerConv: model 5_German Concert Hall
 6harkerConv: model 6_BMT Hall Small
 7harkerConv: model 7_BMT Vocal Chamber
 8harkerConv: model 8_ECRR Wooden Hall

All peak limiters at -10dB
 The loudness (trim) of the dhms are controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 55.5 70 to 0 360 degree
 spread1 isControlledBy timbre1 scaling 0 10 to 2 45 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 55.5 70 to 180 540 degree
 spread2 isControlledBy timbre1 scaling 0 10 to 2 45 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 55.5 70 to 180 540 degree
 spread3 isControlledBy timbre1 scaling 0 10 to 2 45 degree

P37



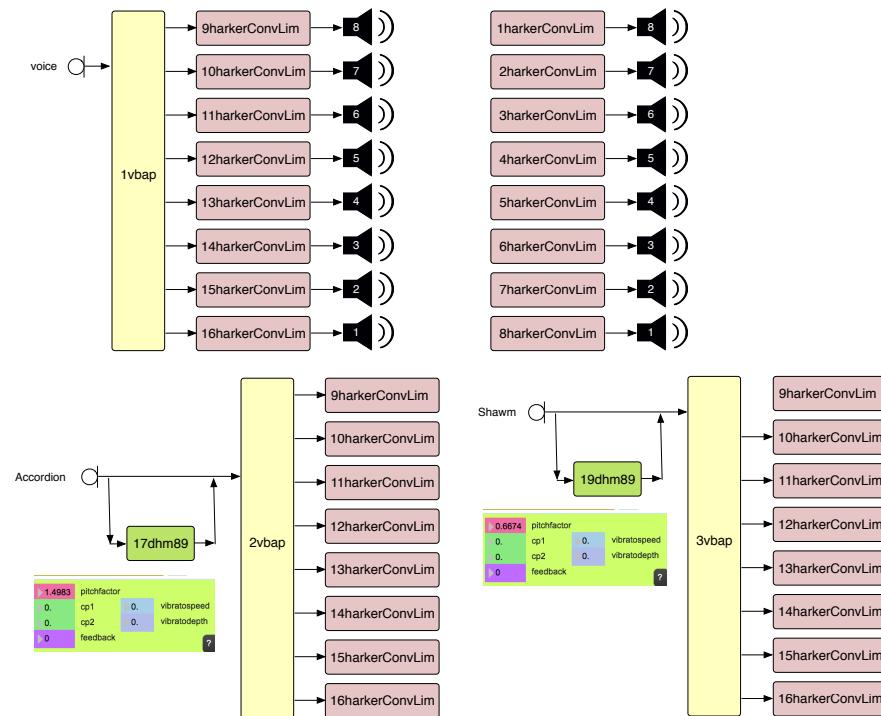
1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 2_NYC Specconter
 3harkerConv: model 3_Bethel Bellringing
 4harkerConv: model 4_German Large Church
 SharkerConv: model 5_German Concert Hall
 6harkerConv: model 6_BM7 Hall Small
 7harkerConv: model 7_BM7 Vocal Chamber
 8harkerConv: model 8_ECCR Wooden Hall

All peak limiters at -10dB
The loudness (trim) of the dhms are controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 54.5 64.5 to 0 360 degree
 spread1 isControlledBy timbre1 scaling 0 10 to 2 90 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 54.5 64.5 to 180 540 degree
 spread2 isControlledBy timbre1 scaling 0 10 to 2 90 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 54.5 64.5 to 180 540 degree
 spread3 isControlledBy timbre1 scaling 0 10 to 2 90 degree

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P38



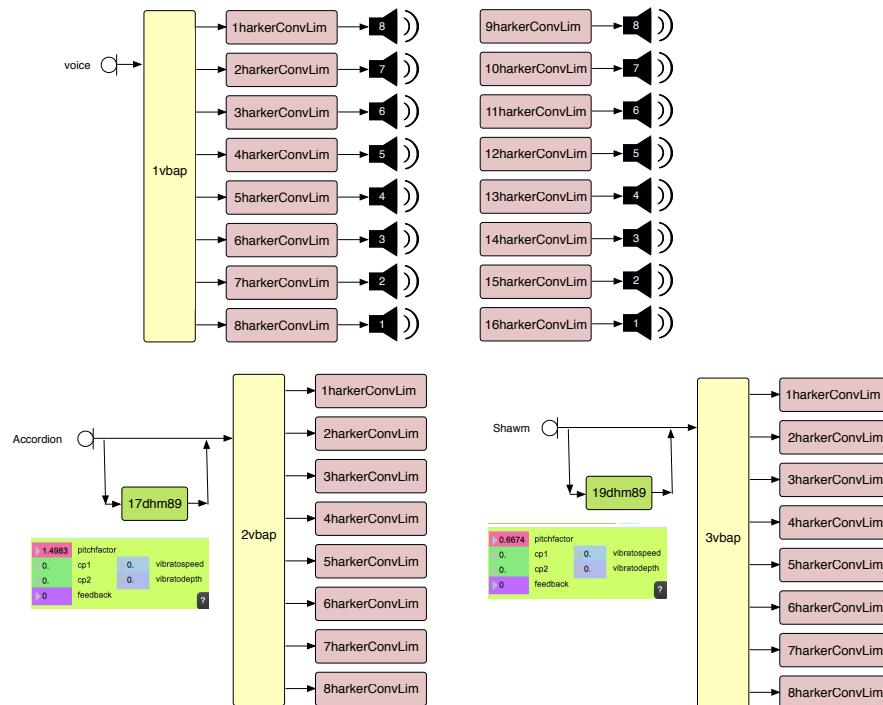
1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 2_NYC Sportscenter
 3harkerConv: model 3_Giant Basilica
 4harkerConv: model 4_German Large Church
 5harkerConv: model 5_German Concert Hall
 6harkerConv: model 6_BMT Hall Small
 7harkerConv: model 7_BMT Vocal Chamber
 8harkerConv: model 8_ECRR Wooden Hall

All peak limiters at -10dB
The loudness (trim) of the dhms are controlled by the loudness of the accordion

```

azimuth1 is controlled by the pitch of the voice, scaling MIDI 54.5 64.5 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 135 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 54.5 64.5 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 135 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 54.5 64.5 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 135 degree
  
```

P39



```

1harkerConv: model 1_Hamilton Mausoleum
2harkerConv: model 2_NYC Specconter
3harkerConv: model 3_Bethel Bellringing
4harkerConv: model 4_German Large Church
5harkerConv: model 5_German Concert Hall
6harkerConv: model 6_BM7 Hall Small
7harkerConv: model 7_BM7 Vocal Chamber
8harkerConv: model 8_ECCR Wooden Hall

```

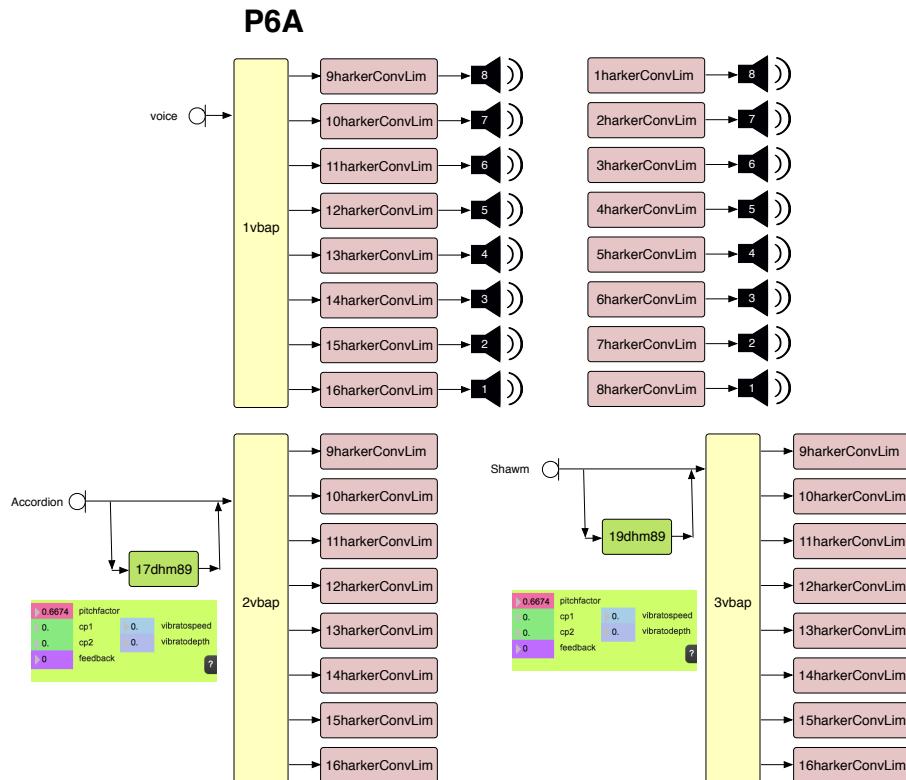
All peak limiters at -10dB
The loudness (trim) of the dhms are controlled by the loudness of the accordion

```

azimuth1 is controlled by the pitch of the voice, scaling MIDI 54.5 71 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 180 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 54.5 71 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 180 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 54.5 71 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 180 degree

```

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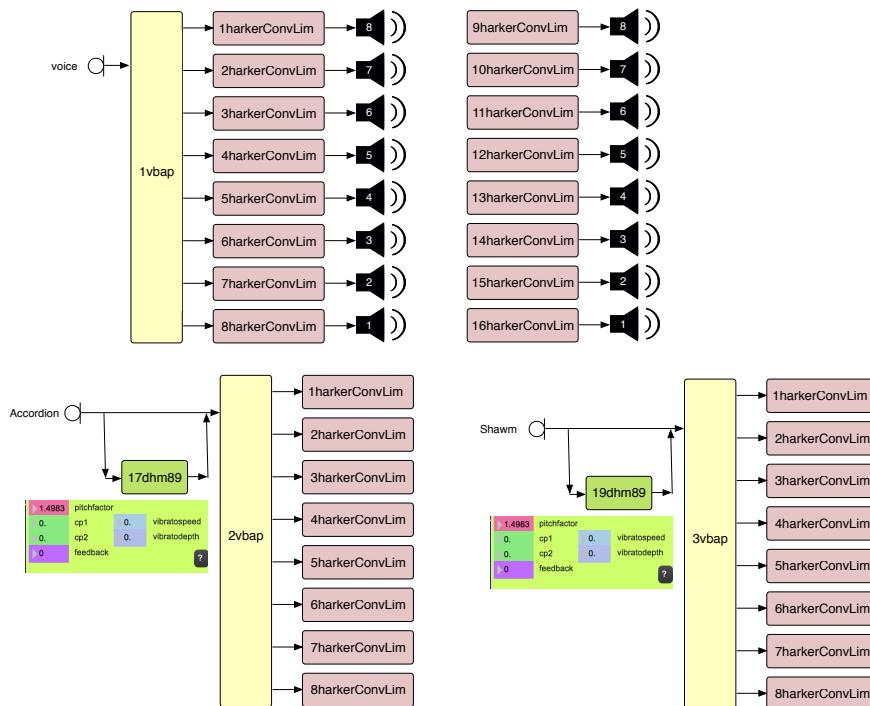


1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 1_Hamilton Mausoleum
 3harkerConv: model 1_Hamilton Mausoleum
 4harkerConv: model 1_Hamilton Mausoleum
 5harkerConv: model 1_Hamilton Mausoleum
 6harkerConv: model 1_Hamilton Mausoleum
 7harkerConv: model 1_Hamilton Mausoleum
 8harkerConv: model 1_Hamilton Mausoleum

All peak limiters at -10dB
 The loudness (trim) of the dhms are controlled by the loudness of the shawm

azimuth1 is controlled by the pitch of the voice, scaling MIDI 66.5 74.5 to 0 360 degree
 spread1 is controlled by the timbre of the voice, scaling 0 10 to 2 45 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 66.5 74.5 to 180 540 degree
 spread2 is controlled by the timbre of the voice, scaling 0 10 to 2 45 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 66.5 74.5 to 180 540 degree
 spread3 is controlled by the timbre of the voice, scaling 0 10 to 2 45 degree

P7A

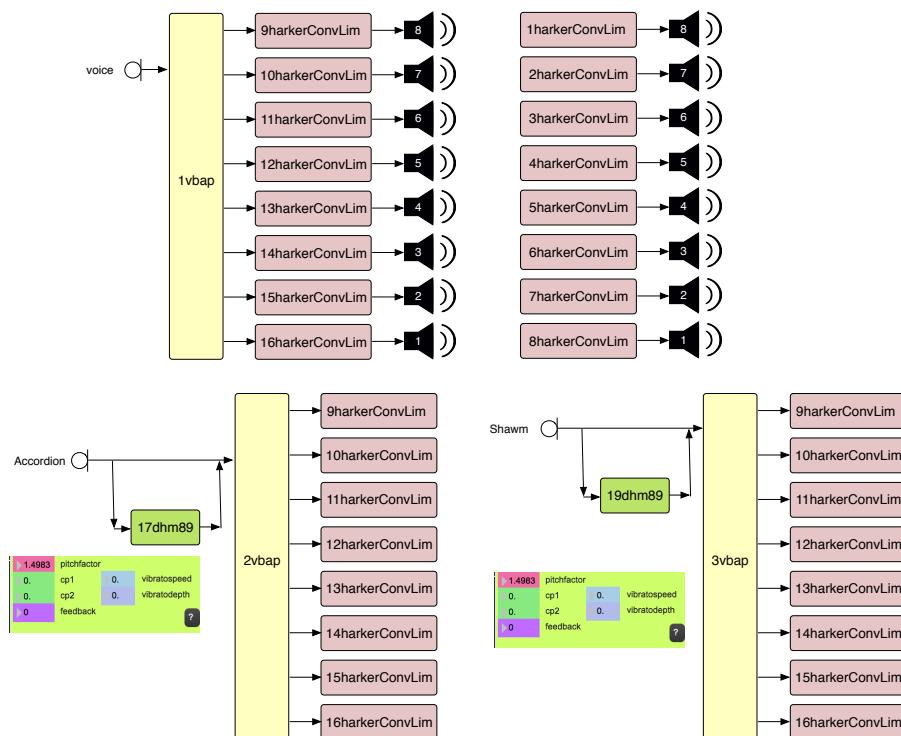


1harkerConv: model 1_Hamilton Mausoleum
2harkerConv: model 1_Hamilton Mausoleum
3harkerConv: model 1_Hamilton Mausoleum
4harkerConv: model 1_Hamilton Mausoleum
5harkerConv: model 2_NYC Sportscenter
6harkerConv: model 2_NYC Sportscenter
7harkerConv: model 2_NYC Sportscenter
8harkerConv: model 2_NYC Sportscenter

All peak limiters at -10dB
The loudness (trim) of the dhms are controlled by the loudness of the shawn

azimuth1 is controlled by the pitch of the voice, scaling MIDI 61 63 to 1 360 degree
spread1 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 61 63 to 181 540 degree
spread2 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 61 63 to 181 540 degree
spread3 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree

P8A

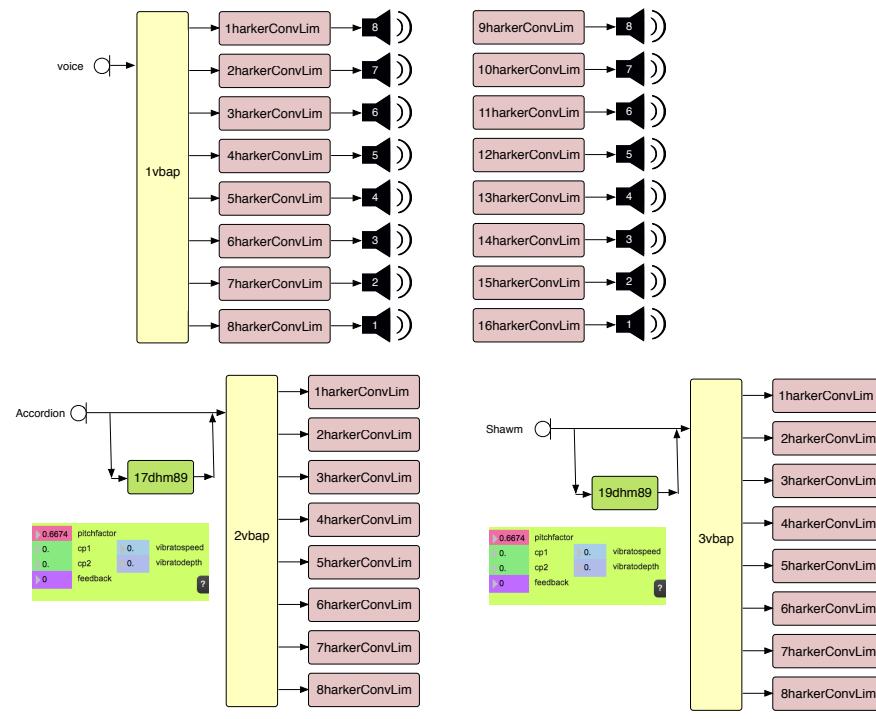


1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 1_Hamilton Mausoleum
 3harkerConv: model 2_NYC Sportcenter
 4harkerConv: model 2_NYC Sportcenter
 5harkerConv: model 3_Giant Basilica
 6harkerConv: model 3_Giant Basilica
 7harkerConv: model 4_German Large Church
 8harkerConv: model 4_German Large Church

All peak limiters at -10dB
 The loudness (trim) of the dhms are controlled by the loudness of the shawm

azimuth1 is controlled by the pitch of the voice, scaling MIDI 66.5 67.5 to 0 360 degree
 spread1 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 66.5 67.5 to 180 540 degree
 spread2 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 66.5 67.5 to 180 540 degree
 spread3 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree

P9A

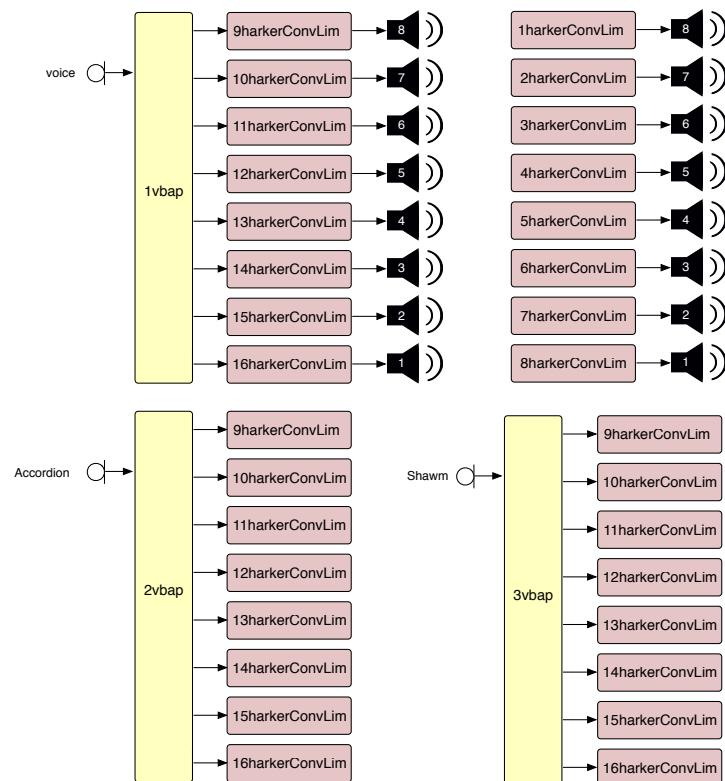


1harkerConv: model 1_Hamilton Mausoleum
2harkerConv: model 1_Hamilton Mausoleum
3harkerConv: model 1_Hamilton Mausoleum
4harkerConv: model 1_Hamilton Mausoleum
5harkerConv: model 2_NYC Sportscenter
6harkerConv: model 2_NYC Sportscenter
7harkerConv: model 2_NYC Sportscenter
8harkerConv: model 2_NYC Sportscenter

All peak limiters at -10dB

azimuth1 is controlled by the pitch of the voice, scaling MIDI 66.5 67.5 to 0 360 degree
spread1 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 66.5 67.5 to 180 540 degree
spread2 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 66.5 67.5 to 180 540 degree
spread3 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree

P10A

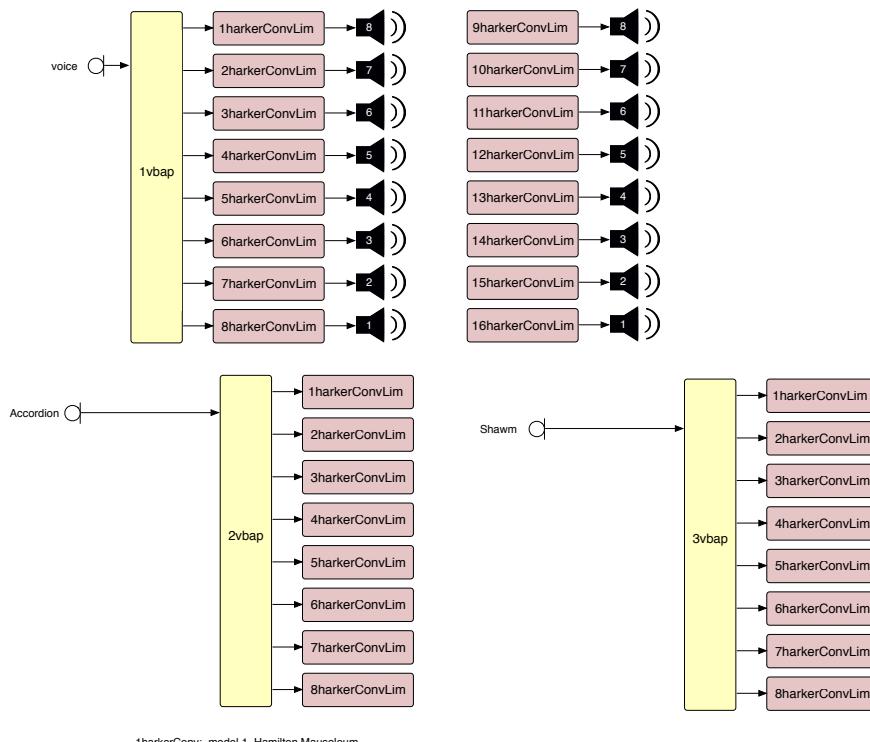


1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 1_Hamilton Mausoleum
 3harkerConv: model 1_Hamilton Mausoleum
 4harkerConv: model 1_Hamilton Mausoleum
 5harkerConv: model 2_NYC Sportscenter
 6harkerConv: model 2_NYC Sportscenter
 7harkerConv: model 2_NYC Sportscenter
 8harkerConv: model 2_NYC Sportscenter

All peak limiters at -10dB

azimuth1 is controlled by the pitch of the voice, scaling MIDI 61.5 74.5 to 0 360 degree
 spread1 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 61.5 74.5 to 180 540 degree
 spread2 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 61.5 74.5 to 180 540 degree
 spread3 is controlled by the timbre of the voice, scaling 0 10 to 2 180 degree

P11A



1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 1_Hamilton Mausoleum
 3harkerConv: model 1_Hamilton Mausoleum
 4harkerConv: model 1_Hamilton Mausoleum
 5harkerConv: model 1_Hamilton Mausoleum
 6harkerConv: model 1_Hamilton Mausoleum
 7harkerConv: model 1_Hamilton Mausoleum
 8harkerConv: model 1_Hamilton Mausoleum

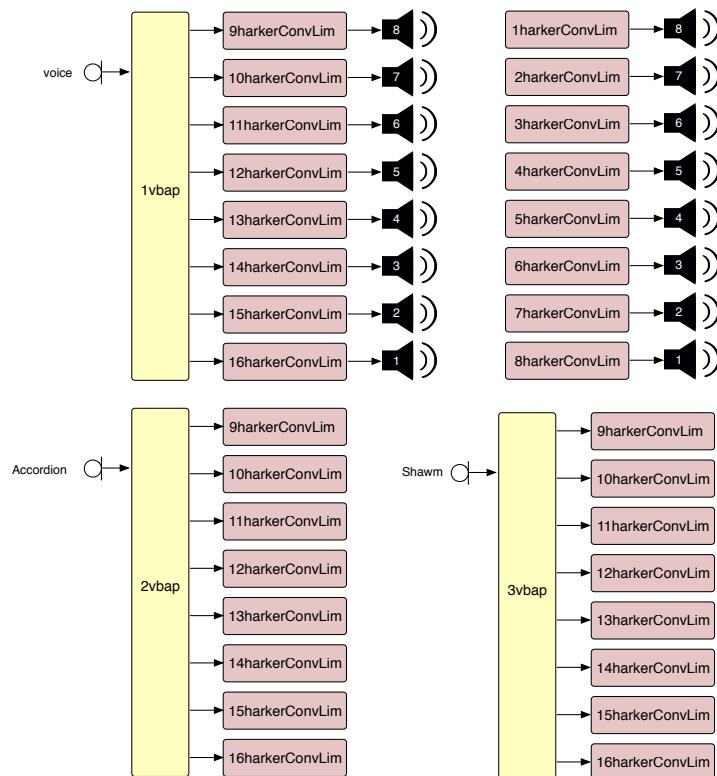
All peak limiters at -10dB

```

azimuth1 is controlled by the pitch of the voice, scaling MIDI 61.5 72.5 to 0 360 degree;
spread1 isControlledBy timbre1 scaling 0 10 to 2 45 degree;
azimuth2 is controlled by the pitch of the voice, scaling MIDI 61.5 72.5 to 180 540 degree;
spread2 isControlledBy timbre1 scaling 0 10 to 2 45 degree;
azimuth3 is controlled by the pitch of the voice, scaling MIDI 61.5 72.5 to 180 540 degree;
spread3 isControlledBy timbre1 scaling 0 10 to 2 45 degree;

```

P40



1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 1_Hamilton Mausoleum
 3harkerConv: model 1_Hamilton Mausoleum
 4harkerConv: model 1_Hamilton Mausoleum
 5harkerConv: model 1_Hamilton Mausoleum
 6harkerConv: model 1_Hamilton Mausoleum
 7harkerConv: model 1_Hamilton Mausoleum
 8harkerConv: model 1_Hamilton Mausoleum

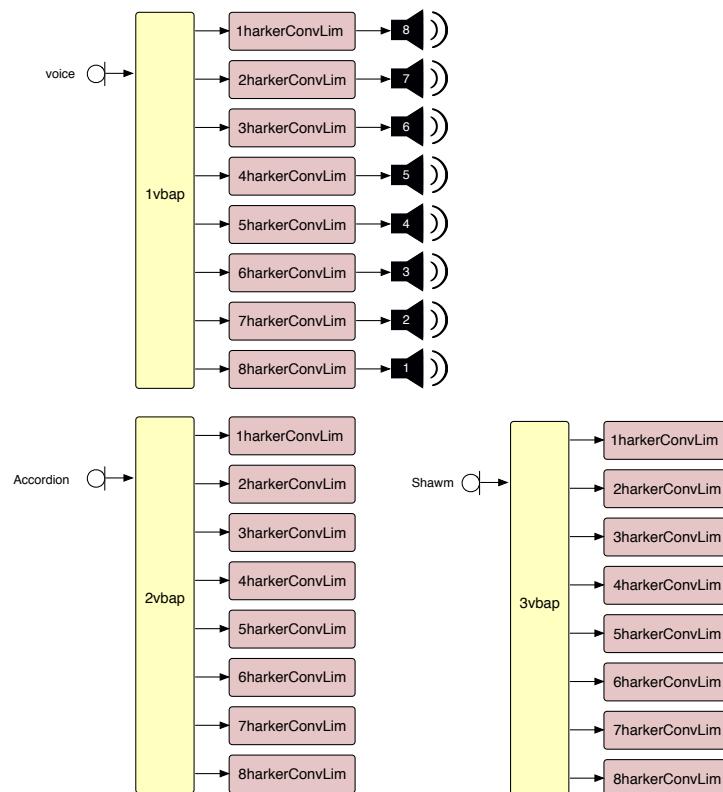
All peak limiters at -10dB

```

azimuth1 is controlled by the pitch of the voice, scaling MIDI 30 120 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 15 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 30 120 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 15 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 30 120 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 15 degree

```

P41

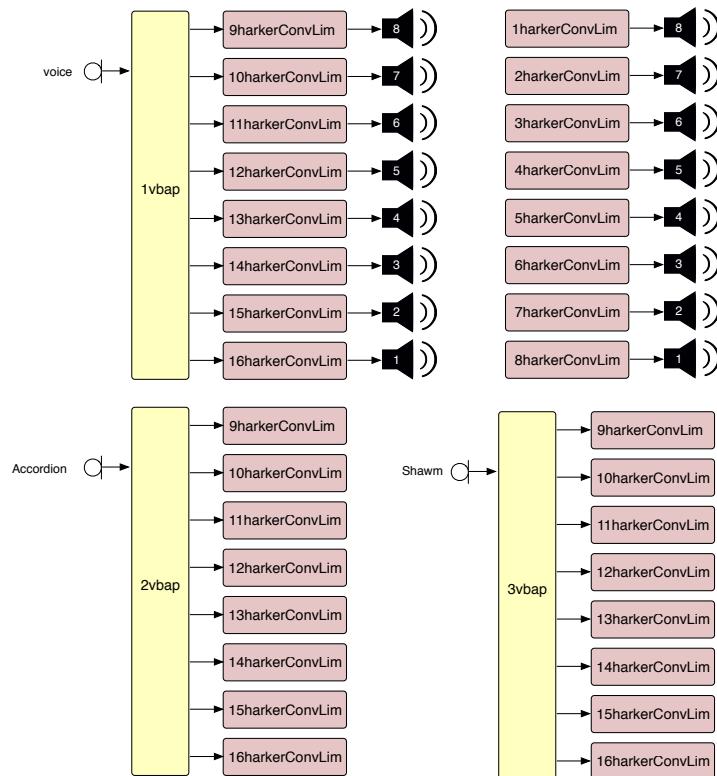


1harkerConv: model_1_Hamilton Mausoleum
 2harkerConv: model_1_Hamilton Mausoleum
 3harkerConv: model_1_Hamilton Mausoleum
 4harkerConv: model_1_Hamilton Mausoleum
 5harkerConv: model_2_NYC Sportscenter
 6harkerConv: model_2_NYC Sportscenter
 7harkerConv: model_2_NYC Sportscenter
 8harkerConv: model_2_NYC Sportscenter

All peak limiters at -10dB

azimuth1 is controlled by the pitch of the voice, scaling MIDI 30 120 to 0 360 degree
 spread1 isControlledBy timbre1 scaling 0 10 to 2 15 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 30 120 to 180 540 degree
 spread2 isControlledBy timbre1 scaling 0 10 to 2 15 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 30 120 to 180 540 degree
 spread3 isControlledBy timbre1 scaling 0 10 to 2 15 degree

P42



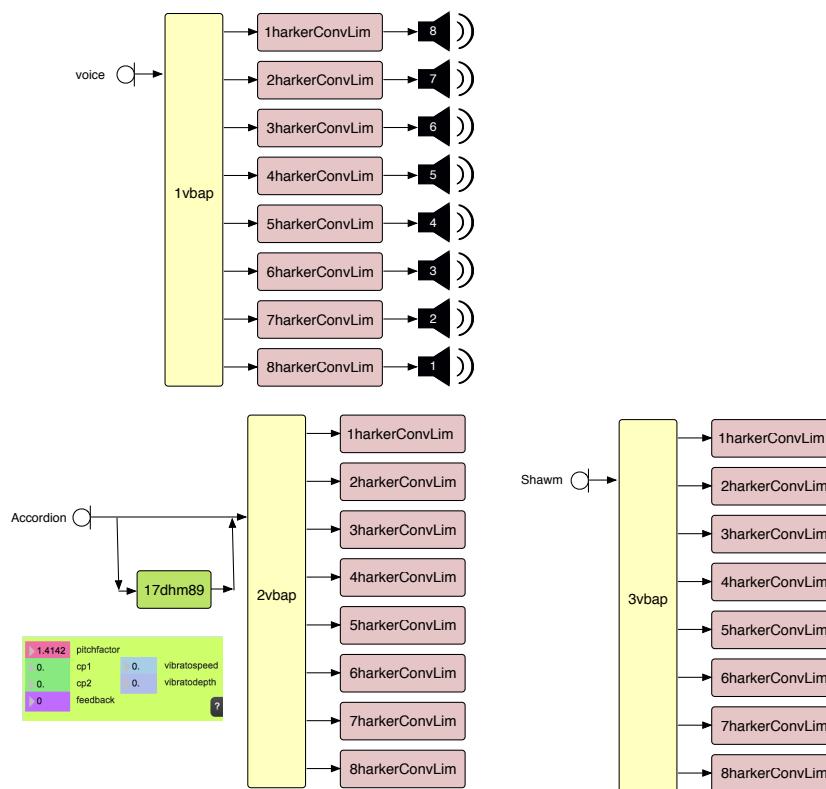
1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 1_Hamilton Mausoleum
 3harkerConv: model 1_Hamilton Mausoleum
 4harkerConv: model 2_NYC Sportscenter
 5harkerConv: model 2_NYC Sportscenter
 6harkerConv: model 2_NYC Sportscenter
 7harkerConv: model 3_Giant Basilica
 8harkerConv: model 3_Giant Basilica

All peak limiters at -10dB

```

azimuth1 is controlled by the pitch of the voice, scaling MIDI 30 120 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 15 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 30 120 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 15 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 30 120 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 15 degree
    
```

P43



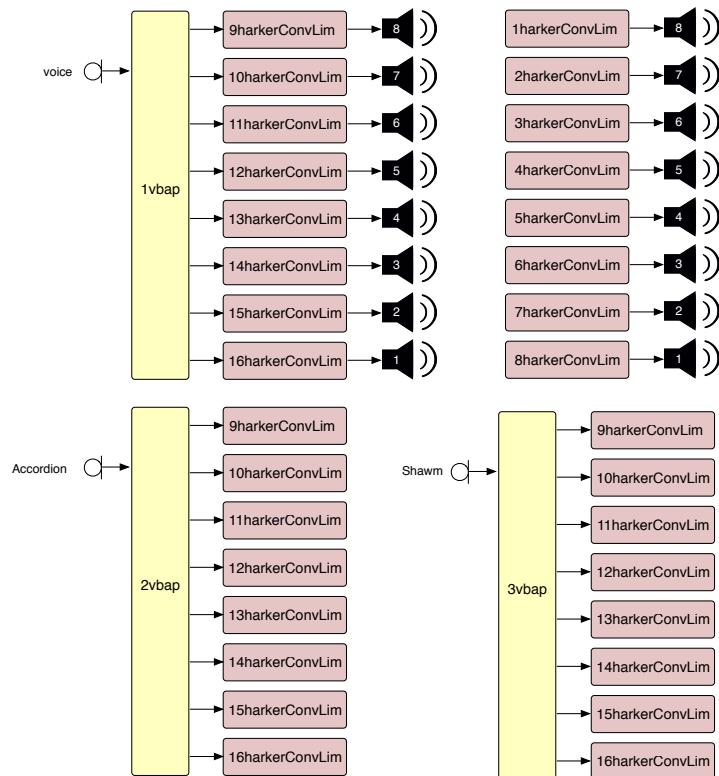
1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 1_Hamilton Mausoleum
 3harkerConv: model 2_NYC Sportcenter
 4harkerConv: model 2_NYC Sportcenter
 5harkerConv: model 3_Giant Basilica
 6harkerConv: model 3_Giant Basilica
 7harkerConv: model 4_German Large Church
 8harkerConv: model 4_German Large Church

All peak limiters at -10dB
 The loudness (trim) of the dhm is controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 30 120 to 0 360 degree
 spread1 isControlledBy timbre1 scaling 0 10 to 2 15 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 30 120 to 180 540 degree
 spread2 isControlledBy timbre1 scaling 0 10 to 2 15 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 30 120 to 180 540 degree
 spread3 isControlledBy timbre1 scaling 0 10 to 2 15 degree

Tue Nov 29 2022, TH

P44



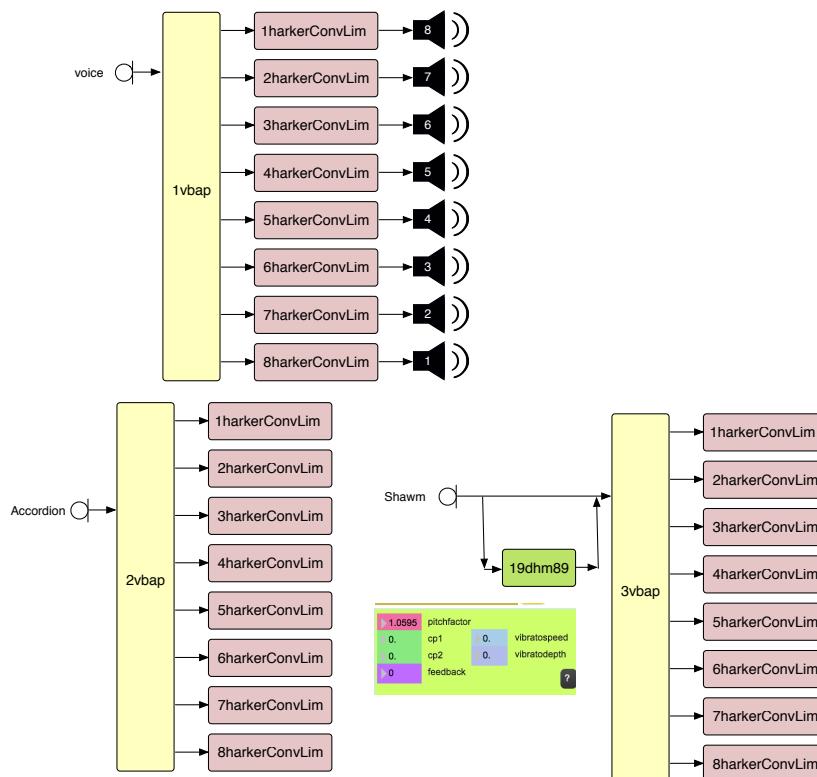
1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 2_NYC Sportscenter
 3harkerConv: model 2_NYC Sportscenter
 4harkerConv: model 3_Giant Basilica
 5harkerConv: model 3_Giant Basilica
 6harkerConv: model 4_German Large Church
 7harkerConv: model 4_German Large Church
 8harkerConv: model 5_German Concert Hall

All peak limiters at -10dB

```

azimuth1 is controlled by the pitch of the voice, scaling MIDI 30 120 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 15 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 30 120 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 15 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 30 120 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 15 degree
    
```

P45



1harkerConv: model 1_Hamilton Mausoleum

2harkerConv: model 2_NYC Sportcenter

3harkerConv: model 3_Giant Basilica

4harkerConv: model 4_German Large Church

5harkerConv: model 4_German Large Church

6harkerConv: model 5_German Concert Hall

7harkerConv: model 5_German Concert Hall

8harkerConv: model 6_BM7 Hall Small

All peak limiters at -10dB
 The loudness (trim) of the dhm is controlled by the loudness of the accordion

azimuth1 is controlled by the pitch of the voice, scaling MIDI 30 120 to 0 360 degree

spread1 isControlledBy timbre1 scaling 0 10 to 2 30 degree

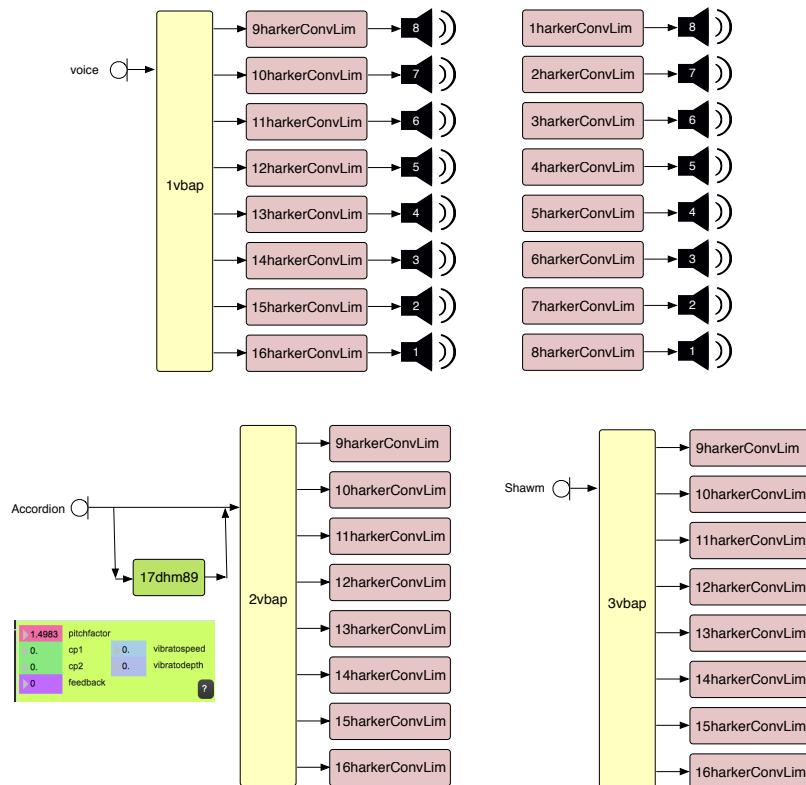
azimuth2 is controlled by the pitch of the voice, scaling MIDI 30 120 to 180 540 degree

spread2 isControlledBy timbre1 scaling 0 10 to 2 30 degree

azimuth3 is controlled by the pitch of the voice, scaling MIDI 30 120 to 180 540 degree

spread3 isControlledBy timbre1 scaling 0 10 to 2 30 degree

P46

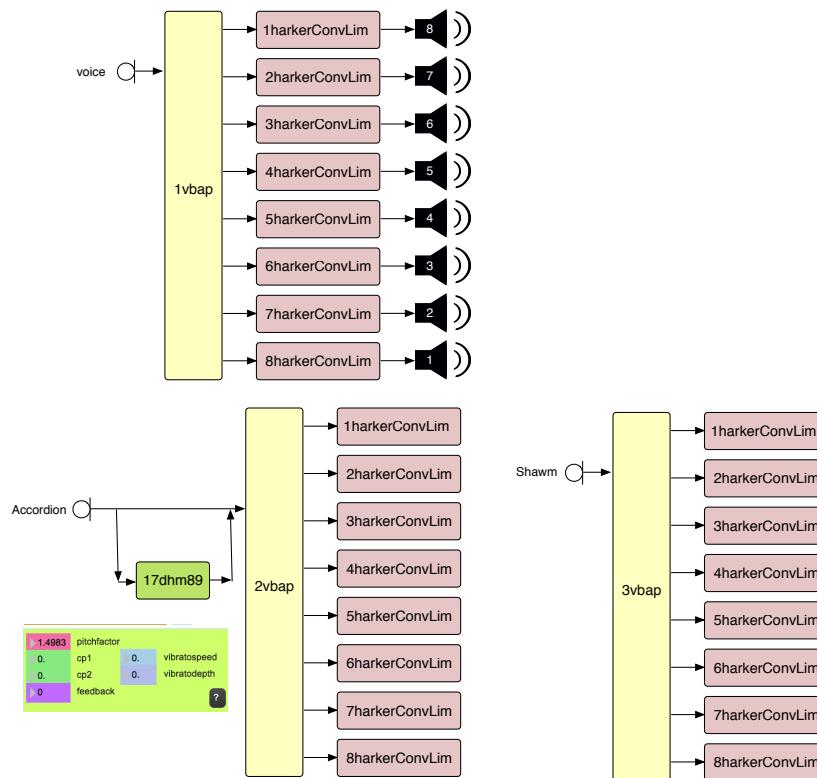


1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 2_NYC Sportscenter
 3harkerConv: model 3_Giant Basilica
 4harkerConv: model 4_German Large Church
 5harkerConv: model 5_German Concert Hall
 6harkerConv: model 6_BM7 Hall Small
 7harkerConv: model 7_BM7 Vocal Chamber
 8harkerConv: model 7_BM7 Vocal Chamber

All peak limiters at -10dB
 The loudness (trim) of the dhm is controlled by the loudness of the accordion

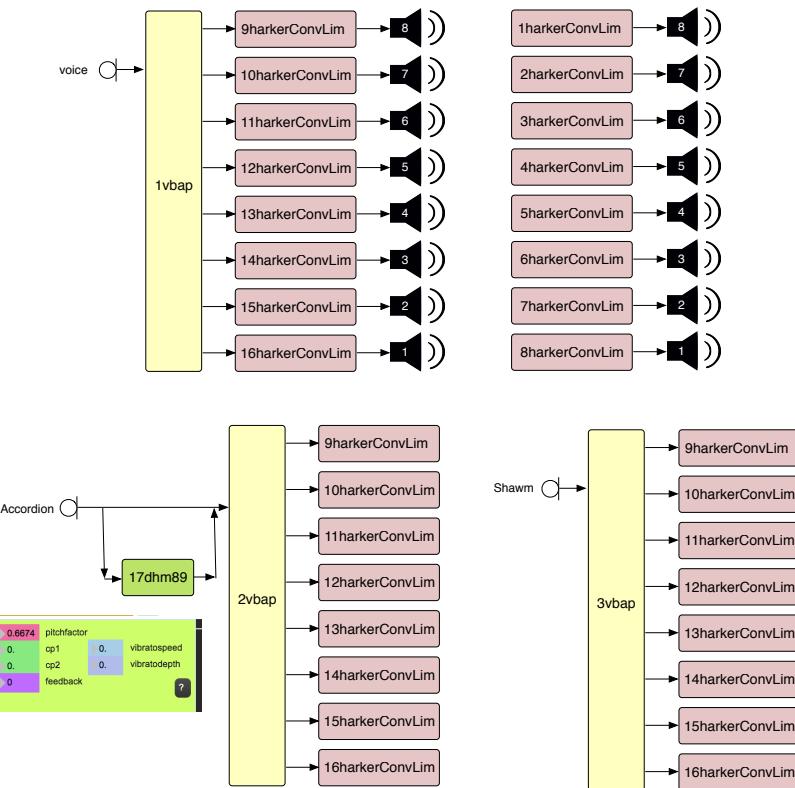
azimuth1 is controlled by the pitch of the voice, scaling MIDI 30 120 to 0 360 degree
 spread1 isControlledBy timbre1 scaling 0 10 to 2 15 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 30 120 to 180 540 degree
 spread2 isControlledBy timbre1 scaling 0 10 to 2 15 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 30 120 to 180 540 degree
 spread3 isControlledBy timbre1 scaling 0 10 to 2 15 degree

P47



azimuth1 is controlled by the pitch of the voice, scaling MIDI 30 120 to 0 360 degree
 spread1 isControlledBy timbre1 scaling 0 10 to 2 60 degree
 azimuth2 is controlled by the pitch of the voice, scaling MIDI 30 120 to 180 540 degree
 spread2 isControlledBy timbre1 scaling 0 10 to 2 60 degree
 azimuth3 is controlled by the pitch of the voice, scaling MIDI 30 120 to 180 540 degree
 spread3 isControlledBy timbre1 scaling 0 10 to 2 60 degree

P48



1harkerConv: model 1_Hamilton Mausoleum
 2harkerConv: model 2_NYC Sportscenter
 3harkerConv: model 3_Giant Basilica
 4harkerConv: model 4_German Large Church
 5harkerConv: model 5_German Concert Hall
 6harkerConv: model 6_BM7 Hall Small
 7harkerConv: model 7_BM7 Vocal Chamber
 8harkerConv: model 8_ECCR Wooden Hall

All peak limiters at -10dB
 The loudness (trim) of the dhm is controlled by the loudness of the accordion

```

azimuth1 is controlled by the pitch of the voice, scaling MIDI 61.5 62.5 to 0 360 degree
spread1 isControlledBy timbre1 scaling 0 10 to 2 45 degree
azimuth2 is controlled by the pitch of the voice, scaling MIDI 61.5 62.5 to 180 540 degree
spread2 isControlledBy timbre1 scaling 0 10 to 2 45 degree
azimuth3 is controlled by the pitch of the voice, scaling MIDI 61.5 62.5 to 180 540 degree
spread3 isControlledBy timbre1 scaling 0 10 to 2 45 degree
    
```

Ex omnibus supra dictis clare apparet,
nos multa percipere, et notiones universales formare

De Natura et Origine
I. Ex Omnibus

Dániel Péter Biró

$\text{♩} = 54 \quad \text{rall.}$

Counter tenor

Accordion

Electronics

Program 1:
Counter tenor range:
Pitch tracking: Midi note 61 and 63
Pitch tracking: 1% - 360%
Timbre tracking: 1% - 45%
Convolution routing: IR1: 1-8

Musical score for three instruments: Cello (Ct.), Accordion (Accord.), and Electric Bass (Elec.). The score consists of three staves. The Cello staff (top) has a treble clef, common time, and a key signature of one sharp. It features eighth-note patterns and dynamic markings like *mp*, *pp*, *p*, and *mf*. The Accordion staff (middle) has a bass clef, common time, and a key signature of one sharp. It includes sustained notes and dynamic markings like *pp*, *p*, and *mp*. The Electric Bass staff (bottom) has a bass clef, common time, and a key signature of one sharp. It shows rhythmic patterns and dynamic markings like *pp*, *p*, and *mp*. The score is divided into measures by vertical bar lines, with some measures spanning multiple staves. Measure numbers 8, 5, 4, 7, 8, 2, and 3 are indicated above the staves.

1. Ex Omnibus 23. October, 2022

3

14

Ct. *mp* *mf* *f* = *p* *f* *ff* *pp* *p* < *f* *pp* < *ff* *pp*

accel.

8:9

ε - i - e - ε

ε - o - i - o - ε

Accord. *mf* *p* *f* *ff* *pp* *p* *ff*

Elec. $\frac{3}{8}$ - $\frac{3}{4}$ - $\frac{5}{16}$ - $\frac{5}{8}$ - $\frac{9}{8}$ - $\frac{9}{4}$ - $\frac{2}{3}$ - $\frac{2}{16}$ - $\frac{2}{8}$ - $\frac{8}{8}$ - $\frac{8}{4}$ - $\frac{2}{3}$ - $\frac{11}{16}$

26

Ct.

$\text{♩} = 54$

$p \xrightarrow{\text{10:11♪}} f \xrightarrow{\text{10:11♪}} p$

$p \xrightarrow{\text{6:7♪}} pp$

u → i → e → a → ε

o → a → ε

Accord.

$\text{♩} = 54$

$p \xrightarrow{\text{10:11♪}} f \xrightarrow{\text{10:11♪}} \text{accord.}$

$pp \xrightarrow{\text{10:11♪}} ppp$

Elec.

A $\text{♩} = 54$ rall.

32

Ct. ppp — pp pp — mp mf — ppp mp — p
 ε - ks om - ni - bu - s sup - ra dik - ti - s

Sh. — $\frac{2}{4}$ — $\frac{7}{16}$ — $\frac{7}{8}$ — $\frac{5}{8}$ mf — p $\frac{6}{16}$ — $\frac{6}{8}$

Accord. ppp — pp — mf — mp —
 Elec. $\frac{2}{4}$ — $\frac{7}{16}$ — $\frac{7}{8}$ — $\frac{5}{8}$ — $\frac{5}{4}$ — $\frac{6}{16}$ — $\frac{6}{8}$

A

Program 2:
 Counter tenor range: Midi note 61 and 64:
 Pitch tracking: 1% - 360%
 Timbre tracking: 1% - 180%
 Convolution routing: IR1: 1-4, IR 2: 5-8

Ct. 39 :
mp *pp* — *p* — *pp* *p* — *mf*
kla - r - ε *a - pa - rε - t* *no - s*

Sha. *pp* *mp*

Accord.

Elec. *pp* *p* — *mp* *mf*

47

Ct. *f* — *p* — *f*

mul - ta

ff — *8:9* — *pp*

per - tsi - pe - re

accel.

p < f

ε - t

Sha. *=f* — *pp*

slow vib. — *~~~~~*

p —

Accord. *p* — *f* — *ff* — *pp* — *p* —

Elec. *5* — *8* — *9* — *9* — *2* — *2* — *16* — *8*

Program 3:
Countertenor range:
Midi note 61 and 70
Pitch tracking: 1% - 360%
Timbre tracking: 1% - 360%
Convolution routing: IR1: 1-3, IR2: 4-6, IR3: 7-8

Ct. 53 *pp — ff — pp*

no - tsi - o - ne s u - ni - ver - sa - le s

fast vib.. slow vib. bisbigliando

Sha. *ff* *p* *f*

Accord.

Program 4:
 Countertenor range:
 Midi note 54 and 72
 Pitch tracking: 1% - 360%
 Timbre tracking: 1% - 180%
 Convolution routing: IR1: 1-2, IR 2: 3-4, IR 3: 5-6, IR 4: 7-8

Elec. $\frac{2}{8}$ - $\frac{8}{8}$ - $\frac{8}{4}$ - $\frac{2}{2}$ - $\frac{11}{16}$ - $\frac{11}{8}$

58 *> p*

Ct. *p* *pp*
for - ma - rε

Sha. *(tr)* *p*

Accord.

Elec.

$\text{♩} = 54$
 $6:7\text{♪}$

Program 5:
 Counter tenor range:
 Midi note 61 and 63
 Pitch tracking: 1% - 360%
 Timbre tracking: 1% - 180%
 Convolution routing: IR1: 1-2, IR 2: 3-4, IR 3: 5-6, IR 4: 7-8

IV. וַיֹּאמֶר

Version B

$\text{♪} = 36$ $\text{♪} = 54 \text{ accel.}$ $\text{♪} = 72$

Countertenor Shawm Accordion

Program 6:
 Countertenor range:
 Midi note 66.5 and 74.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 45%
 Convolution routing: IR1: 1-8
 Shawm: amplitude controls amplitude of Harmonizer
 for shawm and accordion = 5th below original tone

Electronics

$\text{♪} = 63$

Ct. 6 $mf \xrightarrow{\text{---}} p$ $\frac{3}{8}$ $\frac{3}{2}$ $\frac{3}{8}$
 $\varepsilon - \text{hi} - \text{j}\varepsilon$

$\text{♪} = 45$

s. $p \xrightarrow[3:2]{\text{---}} p$ $\frac{4}{8}$ $\frac{3}{2}$ $\frac{3}{8}$
 $a - \text{f}\varepsilon - r$

Accord.
 $\frac{3}{8}$ $\frac{3}{2}$ $\frac{3}{8}$
 $\approx mf \xrightarrow{\text{---}} ppp$
 $\frac{3}{8}$ $\frac{3}{2}$ $\frac{3}{8}$
 $p < mf > p$
 $\frac{3}{8}$ $\frac{3}{2}$ $\frac{3}{8}$
 ppp

Elec.. $\frac{3}{8}$ $\frac{3}{2}$ $\frac{3}{8}$ $\frac{3}{8}$

Program 7:

Countertenor range:
Midi note 61.5 and 74.5
Pitch tracking: 0% - 180%
Timbre tracking: 0% - 360%
Convolution routing
: IR1: 1-4, IR2: 5-8
Shawm: amplitude controls
amplitude of Harmonizer
for shawm and accordion
= 5th above original tone

Program 8:

Countertenor range:
Midi note 66.5 and 67.5
Pitch tracking: 0% - 360%
Timbre tracking: 0% - 180%
Convolution routing: IR1: 1-2,
IR2: 3-4, IR3: 5-6, IR4: 7-8
Shawm: amplitude controls amplitude of Harmonizer
for shawm and accordion = 5th above original tone

$\text{♪} = 63$

10 **p** ————— ***mf***

Ct. $\begin{array}{c} \text{3} \\ \text{8} \end{array}$ ε - hi - jε $\begin{array}{c} \text{4} \\ \text{2} \end{array}$ [$\begin{array}{c} \text{6} \\ \text{8} \end{array}$

S. $\begin{array}{c} \text{3} \\ \text{8} \end{array}$ $\begin{array}{c} \text{4} \\ \text{2} \end{array}$ [$\begin{array}{c} \text{6} \\ \text{8} \end{array}$

ppp ***fff***

Accord. $\begin{array}{c} \text{3} \\ \text{8} \end{array}$ $\begin{array}{c} \text{4} \\ \text{2} \end{array}$ [$\begin{array}{c} \text{6} \\ \text{8} \end{array}$

mf

Elec.. $\begin{array}{c} \text{3} \\ \text{8} \end{array}$ ————— $\begin{array}{c} \text{4} \\ \text{2} \end{array}$ [$\begin{array}{c} \text{6} \\ \text{8} \end{array}$

Program 9:
 Counter tenor range:
 Midi note 66.5 and 67.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 180%
 Convolution routing: IR1: IR1: 1-4,
 IR2: 5-8
 Shawm: amplitude controls amplitude of Harmonizer
 for shawm and accordion = 5th below original tone

$\text{♪} = 72$ rall.

12 *ppp* ————— *f* ————— *pp* ' *pp* ————— *mf* ————— , *pp* ————— *mp* —————

Ct. $\begin{array}{c} \text{6} \\ \text{8} \end{array}$ va - jo - - mér ko to-mar liv - ne! $\begin{array}{c} 3 \\ 8 \end{array}$

S. $\begin{array}{c} \text{6} \\ \text{8} \end{array}$ 3 - $\begin{array}{c} 1+4 \\ 168 \end{array}$ - $\begin{array}{c} 3+5 \\ 168 \end{array}$ - $\begin{array}{c} 3 \\ 8 \end{array}$

ppp

Accord. $\begin{array}{c} \text{6} \\ \text{8} \end{array}$ 3 - $\begin{array}{c} 1+4 \\ 168 \end{array}$ - $\begin{array}{c} 3+5 \\ 168 \end{array}$ - $\begin{array}{c} 3 \\ 8 \end{array}$

$\begin{array}{c} \text{6} \\ \text{8} \end{array}$ 3 - $\begin{array}{c} 1+4 \\ 168 \end{array}$ - $\begin{array}{c} 3+5 \\ 168 \end{array}$ - $\begin{array}{c} 3 \\ 8 \end{array}$

Elec.. $\begin{array}{c} \text{6} \\ \text{8} \end{array}$ - $\begin{array}{c} 3 \\ 8 \end{array}$ - $\begin{array}{c} 1+4 \\ 168 \end{array}$ - $\begin{array}{c} 3+5 \\ 168 \end{array}$ - $\begin{array}{c} 3 \\ 8 \end{array}$

Program 10:
 Countertenor range:
 Midi note 61.5 and 74.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 180%
 Convolution routing: IR1: 1-4, IR2: 5-8

$\text{♪} = 36$

Ct.

Accord.

Elec..

Program 11:
 Countertenor range:
 Midi note 61.5 and 72.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 45%
 Convolution routing: IR1: 1-8

Ex singularibus nobis per sensus mutilate,
confuse et sine ordine ad intellectum repraesentatis
et ideo tales perceptions cognitionem
ab experientia vaga vocare consuevi.

4. Ex Singularibus 23. October, 2022

III: Ex Singularibus

Dániel Péter Biró

1 $\text{♩} = 54$ **accel.**

Countertenor: *rall.* $\text{♩} = 63$ *throat tremolo* *inhaled* *"f"* $\xrightarrow[7:8]{\text{V V V - V}}$ *"p"*
whispered *"ff"* *"fff"* *"mp"* *"p"* *~* *si - ñ-gu* *l - a - r - i - b - u - s*

Shawm: *air noise* *bisbil.* *whispered* *"p"* *"mf"* *p* *s* *pp*

Accordion Voice: *inhaled* *"f"* $\xrightarrow[7:8]{\text{V V V - V}}$ *"p"*
l - a - r - i - b - u - s

Accordion: *bellow noise* $\text{♩} = 6$ *"p"* *"mf"* *7:8* *bellow noise* *pp*

Electronics: $\text{♩} = 6$

Program 12:
 Countertenor range: Midi note 60 and 120
 Pitch tracking: 0% - 90%
 Timbre tracking: 0% - 45%
 Accordion amplitude controls amplitude of shawm harmonizer = 1/16th tone above
 Convolution routing: IR5: 1-4, IR6: 5-8

p < mp

1/2 whispered

ppp < pp > ppp mf > ppp

f

mp > pp < p

mp

p

mf > ppp

bis.

whispered

mp > pp < p pp

mp

pp

mf > ppp

b-i-s

d - v - a - r - i - m

sub. "ff" < "fff"

subito ppp

ppp

pp < p

E.

Program 13:
Countertenor range: Midi note 60 and 120
Pitch tracking: 0% - 225%
Timbre tracking: 0% - 45%
Accordion amplitude controls amplitude of shawm harmonizer = 1/8th tone above
Convolution: IR5: 1-3, IR6: 4-6, IR7: 7-8

Program 14:
Countertenor range:
Midi notes 61.5 and 69.5
Pitch tracking: 0% - 270%
Timbre tracking: 0% - 90%
Accordion amplitude controls amplitude of shawm harmonizer = 1/4 tone above
Convolution routing: IR5: 1-2, IR6: 3-4, IR7: 5-6, IR8: 7-8

Ct. $\text{♩} = 45$ **accel.**

throat tremolo
"p" $f \xrightarrow[5:4]{} mp$ $f \xleftarrow[4:7]{} ff$

s - e - n - s - u - s ha - ſø

S. $ff \xrightarrow[9:8]{} fff$
 p $ff \xrightarrow[9:8]{} fff$

Accord.

$\text{♪} \xrightarrow[5:4]{} \text{♪}$ $\text{♪} \xrightarrow[9:8]{} \text{♪}$
 $mp \geq pp mp ff$ **subito** ppp p $ff \xrightarrow[9:8]{} ppp$

$> ppp$ bellows (noise) $mp \xrightarrow[5:4]{} \text{♪}$ $\text{♪} \xrightarrow[9:8]{} \text{♪}$ $\text{♪} \xrightarrow[9:8]{} \text{♪}$

E. ♪ ♪ ♪ ♪ ♪ ♪ ♪ ♪

2

Program 15:
 Countertenor range:
 Midi notes 53.5 and 56.5
 Pitch tracking: 0% - 315%
 Timbre tracking: 0% - 135%
 Accordion amplitude controls amplitude of shawn harmonizer = minor second above
 Convolution routing: IR4: 1, IR5: 2-3
 IR6: 4, IR7: 5-6, IR8: 7-8

J = 54 rall.

J = 63 rall.

throat tremolo

"p" "mp" "p"

"ff" "fff"

3:2

5:4

p f f > p mf p 5:4 f

sin - gu - la - ri - bus

whispered

"ff" "fff"

3:2

"p" "mp" "p" "f"

5:4

mf p 7:8

ε - k - s s ε - n - s - u - s jø - ha ho - ji - m

ε - k - s

Acc. Voice.

whispered

"p" "f"

5:4

jø - ha sin - gu - la - ri - bus

3:2

5:4

ppp f p mf ppp p mf 7:8

Accord.

3:2

5:4

7:8

E.

4

8

7

8

2

6

4

Program 16:
 Counter tenor range: Midi notes 60.5 and 69.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 90%
 Accordion amplitude controls amplitude of shawm harmonizer = Minor second + tritone above
 Convolution touting: IR3: 1, IR4: 2
 IR5: 3-4, IR6: 5-6, IR8: 7-8

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$\omega = 36$ accel.

$\bullet = 45$ accel.

throat
tremble

3

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6

 $\text{♩} = 54$ accel.

inhaled

fff pp

9:8

V

3:2

V

f

27

Ct.

x - a - - t - e - i

 $\text{♩} = 63$ accel.***p*** ***ppp*** ***f***

4:7

12:7

4:5

5

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11

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311

312

313

314

315

316

317

318

319

320

321

$\text{♩} = 72$ **rall.**

throat tremolo

Ct. f pp mf

30 k - o - n - f - u - s - e

S. mp p mf

Accord.

E. $\frac{7}{8}$

$\text{♩} = 63$ **rall.**

whispered "mp" < "mf"

7

Program 17:
 Countertenor range: Midi notes 60.5 and 69.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 90% Accordion amplitude
 controls amplitude of
 shawm harmonizer = Major second above
 Convolution Routing: IR3: 1, IR4: 2
 IR5: 3-4, IR6: 5-6, IR8: 7-8

$\text{J} = 54 \text{ rall.}$ $\text{J} = 45 \text{ accel.}$ $\text{J} = 54 \text{ accel.}$

Ct. 33

S.

Accord.

E.

Program 18:
 Counter tenor range: Midi notes 60.5 and 71.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 45%
 Accordion amplitude controls amplitude of shawn harmonizer = Major 2nd + 1/4 tone
 Convolution routing: IR2: 1, IR4: 3
 IR4: 3, IR5: 5-4, IR6: 7, IR7: 8

$\bullet = 63$ accel.

Musical score for orchestra and choir, page 10, section 43. The score includes parts for Cello (Ct.), Soprano (S.), Bassoon (Bass.), and Accordion (Accord.). The tempo is indicated as $\text{♩} = 72$ rall.

The vocal parts sing the lyrics: "rep - re - sen - ta - ti - s i - n - e - e - l - l - \epsilon - k - t - u - m".

Instrumental dynamics and markings include:

- Cello (Ct.): f , mp , fff (with a 8:11L bracket), p , mf (with a 5:4L bracket), $3:2L$, $3:2L$.
- Soprano (S.): f , mp , ff (with a 8:11L bracket), $3:2L$.
- Bassoon (Bass.): f , mp , ff (with a 8:11L bracket), $3:2L$.
- Accordion (Accord.): f , mp , ff (with a 8:11L bracket), $3:2L$, ppp .

Performance instructions include circular arrows above the measures and vertical lines indicating sustained notes or specific performance techniques.

Ct. $\text{♩} = 63$ rall. $\text{♩} = 54$ rall. $\text{♩} = 45$ accel. $\text{♩} = 54$ accel.

throat tremolo 10 (-14) whispered

"ff" < "fff" *"ff" < "fff"*

S. $\text{♩} = 45$ *p* $\text{♩} = 6$ *mf* $\text{♩} = 6$ *p*

Acc. Voice. $\text{♩} = 2$ *p* $\text{♩} = 4$ *mf* $\text{♩} = 6$ *mf*

Accord. $\text{♩} = 2$ *mf* $\text{♩} = 4$ *pp* *p* *ppp* *mf* *pp*

E. $\text{♩} = 4$ *mf* $\text{♩} = 6$ *mf*

Program 19:

Counter tenor range: Midi notes 65.5 and 120
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 90%
 Accordion amplitude controls amplitude of shawm harmonizer = minor 3rd above
 Convolution routing: IR1: 1, IR2: 2, IR3: 3, IR4: 4, IR5: 5, IR6: 6, IR7: 7, 8

49

Ct. *f* — *mf* *throat tremolo* *5:6* — *pp*

S. *mf* — *p* *5:6* — *8:11* — *5:4*

→ \oplus

cord. *f* — *p* — *ppp* *5:4* — *8* — *ppp*

→ \oplus

Program 20:

Countertenor range: Midi notes 65.5 and 12

Pitch tracking: 0% - 360%

Timbre tracking: 0% - 135%

Accordion amplitude controls amplitude of

shawm harmonizer = minor 3rd + 1/4 tone above

Convolution routing: IR1: 1, IR2: 2, IR3: 3, IR4: 4, IR5:5, IR6:6, IR7, IR8:8

$\text{♩} = 72$ rall.throat
tremolo

51

Ct. $p \longrightarrow mf \longrightarrow p \longrightarrow f$

S. $p \longrightarrow mf \longrightarrow p \quad p \longrightarrow mf \quad f \quad p \longrightarrow ff$

Accord. $pp \longrightarrow mf \longrightarrow p \longrightarrow f \quad p \longrightarrow ppp$

$8:11\downarrow$ $5:4\downarrow$ $3:2\downarrow$ $3:2\downarrow$ $8:11\downarrow$ $5:4\downarrow$ $3:2\downarrow$ $3:2\downarrow$ $8:11\downarrow$ $5:4\downarrow$ $3:2\downarrow$ $3:2\downarrow$

m - e - n - o - i - s - t - in - go - k

a - b

$f \swarrow ff$
 $\sim\!\!\!\sim\! 3:2\downarrow$

6

♩ = 63

accel.

Ct. 55 *mf* — *f* — *pp* — *ppp* *12:11* — *pp* — *ppp* *12:11* — *pp* — *ppp* *12:11* — *mf* *12:11* — *ff* *5:4* — *pp*
 ε - k - s pe - r - ε - n - tsi - a a - i - s - t - n - ε - i - r - ε - p - s - k - ε

S. whispered
mf — *f* — "fff" — "fff" — "fff" — "ff"
 a - ist - ne - i - rep - s - k - ε ε - ks - per - i - εn - tsi - a

Accord.
 ♪ → *12:11* → ♪ *12:11* → ♪ *12:11* → ♪
 ♪ — *p* — *f* — *pp* — *ppp* — *pp* — *ppp* — *pp* — *f* — *p* — *p*

E. 11 8

11 8

Program 21:

Counter tenor range: Midi notes 62.5 and 75.5

Pitch tracking: 0% - 360%

Timbre tracking: 0% - 180%

Accordion amplitude controls amplitude of

shawm harmonizer = major 3rd above

Convolution routing: IR1: 1, IR2: 2, IR3: 3, IR4: 4, IR5: 5, IR6: 6, IR7, IR8: 8

Ct. 57

p < f pp ff 5:4
f p < ff mp 14:10
tremolo with hand over mouth

S.
whispered "f" < "ff" 5:4
ff mf 14:10
mp

Acc. Voice.
inhaled ff mp inhaled f p 5:4
a - g - a v 5:4
pp p < ff mp 14:10

Accord.
pp p < ff mp 14:10

Ct. *f* — *p* — *ff*

S. *f* — *ff*

Accord.

n - e - m - a - d - z - i - m

3:4 *6:5* *3:2*

6:5 *3:2*

6:5 *3:2*

f *p* *ff*

ff

f *p* *ff*

ff

f *p* *ff*

ff

f *p* *ff*

ff

7

$\text{♩} = 72$

Ct. 64 *pp ff ppp fff* 5:4 *f p subito pp fff* 14:10 *throat tremolo*

S. *molto vib.* 14:10 *pp f fff*

cord. *molto vib.* 14:10 *pp f subito pp f*

Program 22:
 Counter tenor range: Midi notes 45.5 and 74.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 180%
 Accordion amplitude controls amplitude of shawn harmonizer = Major 3rd +1/4 tone above
 Convolution routing: IR1: 1,2; IR2: 3, IR3: 4, IR5: 6, IR5:7, IR6:7,8

E. 4 5

67

Ct. $\text{= } \text{ppp}$

S. $\text{ff} > \text{p} \xrightarrow{\text{6:5}} \text{pp} \xrightarrow{\text{3:2}} \text{ff}$
mi - z - da *m - e - n*

$\text{= } \text{ppp}$ ff ff fff

Accord.

19

Ct. *subito*
70 *pp* — *ppp* — *pp* — *p* — *f*
12:11 *12:11*

S. *whispered*
"ff" — "f" — *p* — *f* — *12:11* *12:11*
7:5 *7:5*

Accord.
subito
pp — *p* — *f* — *p* — *ff*
12:11 *12:11*

E. *11* *8* *5*

8 *throat tremolo*

The vocal parts (Ct. and S.) have lyrics written below the notes:

- Ct.: a - i - s - t - n - e - i - r - e
p - s - k - e
- S.: e - ks - per - i - en - tsi - a p - s - k
f
- Ct.: ni sa - - jo - n

Program 23:
 Counter tenor range: Midi notes 45.5 and 74.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 135%
 Accordion amplitude controls amplitude of shawm harmonizer = tritone above
 Convolution routing: IR1: 1,2; IR2: 3,4 IR3: 5, IR4: 6, IR5:7, IR6:8

20

rall.

Ct. 73 whispered
 "mf" "mp" "mf" "f" 12:11 5:4 p pp

S. whispered
 "mf" < "f" > "p" "mf" "mp" "p" "mf"
 3:2 12:11

Acc. Voice. whispered
 "mf" "mp" "mf" "f" 12:11

Accord. f pp

whispered "mf" ————— "ff" *v - a - g - a*

pp < mp ————— *pp "mp < ff"* whispered "ff" ————— "p" *pp < p "mf" > p*

mi - z - da - m - e - n

inhaled "f" ————— "mf" inhaled "f" ————— "ff" "ff" ————— "mp" "p" ————— "ff" "p"

a - g - a - v *n - e - m - mp* *z - i - m - d - a - d*

inhaled "mf" ————— "ff" "p" < "mf" ————— "pp"

a *mi - z - da*

→ ⊕ → ⊕ ⊕ → ⊕

= *mf* ————— *ppp* ————— *mp* ————— *pp* ————— *p*

E. 4 8 5 8 2 5 8

Program 24:

Countertenor range: Midi notes 59.5 and 72.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 45%
 Accordion amplitude controls amplitude of shawm harmonizer = Tritone+14 tone above
 Convolution routing: IR1: 1,2; IR2: 3,4 IR3: 4,5
 IR4: 6,7,8

22

whispered

mp ————— *f* "mf" "mp" "p" "mp" ————— "mf"

12:11

Ct. 81

S.

mf

Accord.

The musical score page 22 features three vocal parts: Counter (Ct.) and Soprano (S.) in treble clef, and an Accordion (Accord.) in bass clef. The vocal parts begin with a dynamic of *mp*, followed by a crescendo to *f* with the instruction "mf", then a decrescendo to "mp", "p", and "mp". The vocal parts continue with a dynamic of "mf". The lyrics "ek-s-p-e-ri-ence" are written below the vocal lines, with specific dynamics assigned to each syllable: *ek* (mp), *s* (f), *p* (mf), *e* (mp), *r* (p), *i* (mp), *nce* (mf). The vocal parts end with a dynamic of "mf". The Accordion part consists of four staves, each with a sustained note. The dynamics for the Accordion are *ppp*, *mp*, and *pp*. The score includes various performance instructions such as "whispered", "12:11", and dynamic markings like "mf", "mp", "p", and "pp".

23

84

Ct.

inhaled whispered inhaled

"f" *mf* "f" "ff"

10:8♪

a - - g - - a - v

S.

whispered inhaled

"mf" "ff"

5:4♪

v - a - g

throat tremolo

"f" "fff"

14:10♪

s

cord.

mf

ppp

14:10♪

mp

p *pp* *p*

→ ⊖

accel.

87 *ppp*

Ct. **10** **#** **8** **12:11** **"f"** **ppp**

S. **"f"** **"ff"** **12:11**

S. **e - k - s**

bellow noise

Accord.

E.

Program 25:
 Counter tenor range: Midi notes 60 and 120
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 45%
 Accordion amplitude controls amplitude of
 shawm harmonizer = 5th above
 Convolution routing: IR1: 1,2, 3; IR2: 4,5 IR3: 5,6
 IR4:7,8

90

whispered
p → pp

5:4

"p" 14:10
"ff"

5:4

whispered
p → pp

v

air only
14:10
"p"

5:4

inhaled
"mf" < "ff"
5:4

a -

bellow noise
"pp" → "ff"

i

"p" → "f"

bellow noise
p → pp

Acc. Voice.

Accord.

5:4

"p" → "ff"

5:4

26

Ct. "p" — "ff" "pp" > "ppp" < "pp" "pp" > "ppp" < "pp"

S. "ff" "p" — "ff" "pp"

Acc. Voice. "p" — "ff" "p" — "ff" "p" — "ff" "p" — "ff" "p" — "ff"

Accord. "p" — "ff" "p" — "ff" "p" — "ff" "p" — "ff"

$\downarrow = 63$ accel.

1/2 whispered

whispered

1/2 whispered

27

100

Ct. *vo* "f" "p" "f" "p" "ff" "p" "ff" "p"

S. *k - o - n* *ka* *s - u - e*

whispered "f" "p" "ff" "ff" "p" "pp"

Acc. Voice. *k - o - n* *a* *v*

inhaled "p" "f" "p" "f" "p" "f" "p" "f"

bellow noise "p" "f" "p" "f" "p" "f" "p" "f"

Accord. "p" "pp" "p" "pp" "p" "pp" "p" "pp"

E. "p" "f" "p" "f" "p" "f" "p" "f"

28

1/2 whispered

Ct. 104 *pp* *ppp* *tremolo* *"mf"* *"p"* lunga possible
re i

S. air only *"ppp"* *"fff"* air only *"pp"* *"ff"* *"pp"* lunga possible

Acc. Voice. inhaled *"p"* *f* whispered *"pp"* *"ff"* *"pp"*
e V V V i
6 8 8 8
bellow noise *pp* *ff* bellow noise *pp* lunga possible
mp *ppp* " Accord.

Ego sum qui sum, et consilium meum non est cum impiis;
sed in lege Domini voluntas mea est

IV. Ego sum qui sum

Countertenor

$\text{♩} = \text{ca. } 54\text{--}72$ **poco accel.** **rall.** **rit.**

3+2+2+1 *ε - go sum kwi sum* **1+4+2** *et kon - si - li - um me - um*

Shawn

Stoff im Becher

3+2+2+1 *p pp* **1+4+2** *pp ppp*

Accordion

3+2+2+1 *U → ○ ○ → ○ ○ → ○ ○* **1+4+2** *○ → ○ ○ → ○ ○*

pp p ppp *U ○ → ○ ○ → ○ ○* *○ → ○ ○ → ○ ○*

pp < p ppp *pp p ppp*

Electronics

Program 26:
 Counter tenor range: Midi notes 59.5 and 74.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 180%
 Accordion: amplitude controls amplitude of Harmonizer
 for shawn = octave above original tone
 Convolution routing: IR1:1, IR2:2, IR3: 3, IR4: 4, IR5: 5, IR6:6, IR7: 7, IR8:8

Program 27:
 Counter tenor range: Midi notes 59.5 and 74.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 180%
 Accordion: amplitude controls amplitude of Harmonizer
 for shawn = octave below original tone
 Convolution routing: IR1:8, IR2:7, IR3: 6, IR4: 5, IR5: 4, IR6:3, IR7: 2, IR8:1

2

3

Ct. **2+1+2+4** poco accel. *pp* *p* *rall.* *ppp*
 non est kum im pi is

S. **2+1+2+4** *pp* *p* *ppp*

2+1+2+4 *pp* *p* *ppp*

Accord. *pp* *p* *ppp*

2+1+2+4 *pp* *p* *ppp*

Program 28:
 Counter tenor range: Midi notes 59.5 and 74.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 180%
 Accordion: amplitude controls amplitude of Harmonizer
 for shawm = octave above original tone
 Convolution routing: IR1:1, IR2:2, IR3: 3, IR4: 4, IR5: 5, IR6:6, IR7: 7, IR8:8

E.

3

accel. - - - - - rall. - - - - - 4

Ct. **1+2+3+4** **U** **pp** - - - - - **rall.** - - - - - **mp** - - - - - **ppp** 3

sed in le - - ge do - - mi - - ni

S. **1+2+3+4** - - - - - **mp** - - - - - **ppp**

Accordion. **1+2+3+4** **U** **pp** - - - - - **mp** - - - - - **ppp**

Accordion. **1+2+3+4** **pp** - - - - - **mp** - - - - - **ppp**

E.

Program 29:
 Counter tenor range: Midi notes 59.5 and 74.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 180%
 Accordion: amplitude controls amplitude of Harmonizer
 for shawm = octave below original tone
 Convolution routing: IR1:8, IR2:7, IR3: 6, IR4: 5, IR5: 4, IR6:3, IR7: 2, IR8:1

Ct. *poco accel.* *poco rit.* *molto rit.*
pp *p* *ppp* *P* *U* *ppp lunga*
 vo - lun - tas me - a est a - le - lu - ia

S. *3+2+2* *p* *5* *ppp*

Accord. *3+2+2* *pp* *p* *ppp* *5* *p* *ppp lunga*
pp *p* *ppp*

Accord. *3+2+2* *pp* *p* *ppp* *5* *p* *ppp lunga*
pp *p* *ppp*

Program 30:
 Counterenor range: Midi notes 59.5 and 74.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 180%
 Accordion: amplitude controls amplitude of Harmonizer
 for shawm = octave above original tone
 Convolution routing: IR1:1, IR2:2, IR3: 3, IR4: 4, IR5: 5, IR6:6, IR7: 7, IR8:8

E.

V: Ex Signis

V: Ex Signis

1

$\text{♪} = 108 \text{ rall.}$ $\text{♪} = 72$

Countertenor: *ppp* — *mf* — *p* — *ppp*

Shawm: *ppp* — *pp* — *p* — *ppp*

Accordion Voice: *7* — *8* — *2* — *4* — *2* — *4* — *3* — *4*

Accordion: *ppp* — *pp* — *ppp* — *ppp* — *ppp* — *ppp* — *pp* — *ppp*

2

$\text{♪} = 144 \text{ rall.}$

throat tremolo: *ff* — *pp* — *ff*

fast vibrato: *fff* — *3:2* — *fff*

subito *mf*: *p > pp < p* — *3:2* — *fff*

subito *fff*: *mp* — *pp* — *fff*

Program 31:
 Countertenor range: Midi notes 56.5 and 63.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 30%
 Accordion: amplitude controls amplitude of shawm harmonizer = 5th below original tone
 Convolution routing: IR1:1, IR2:2, IR3: 3, IR4: 4, IR5: 5, IR6:6, IR7: 7, IR8:8

Electronics: *7* — *8* — *2* — *4* — *2* — *4* — *3* — *4*

$\text{♪} = 108$ **accel.**

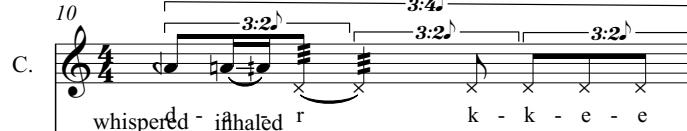
C. S. Accord. E.

Program 32:
 Countertenor range: Midi notes 56.5 and 63.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 15%
 Accordion: amplitude controls amplitude of shawm harmonizer = 5th below original tone
 Accordion: amplitude controls amplitude of accordion harmonizer = 5th above original tone
 Convolution routing: IR1:1, IR2:2, IR3: 3, IR4: 4, IR5: 5, IR6:6, IR7: 7, IR8:8

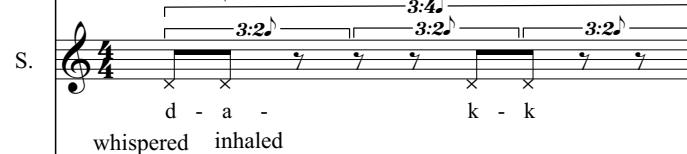
3

 $\text{♪} = 144$ inhaled

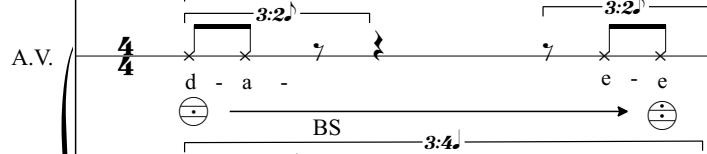
ff < **fff**
 v v **mf** ————— **p** == **pp** < **p**

C. 

ff < **fff**
 v **p** **pp**

S. 

ff < **fff**
 v **pp** **p**

A.V. 

ff < **fff** **mp** == **p** > **pp** < **p**

Accord.

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(8+7+4)

ff ————— **fff**
 inhaled v v

throat tremolo
mf ————— **p** > **pp** < **p**
 19:18♪

ha - hi - t - bo - - n
 3:2 19:18♪
 o - n - o - t

(8+7+4) **pp** **p**
 3:2 19:18♪

d - a - k - k
 whispered inhaled n t

ff < **f** **fff**
 inhaled v v 19:18♪

ha - hi - t - o
 3:2 19:18♪
 fast vibrato

(8+7+4) **pp** **ff** **mp** == **p** > **pp** < **p**
 3:2 19:18♪

fast vibrato

pp **ff** **mp** == **p** > **pp** < **p**
 3:2 19:18♪

Program 33:

Countertenor range: Midi notes 67.5 and 69.5

Pitch tracking: 0% - 360%

Timbre tracking: 0% - 30%

Accordion: amplitude controls amplitude of shawm harmonizer = 5th below original tone
 Convolution routing: IR1:1, IR2:2, IR3: 3, IR4: 4, IR5: 5, IR6:6, IR7: 7, IR8:8

3

E. 

♩ = 108

rall.
throat tremolo
mf ————— *p* *mf* ————— *p* *subito* *fff*

C. 12 ha - la - lu

S. slow vib. fast vib.
mp ————— *p* *subito* *fff*

A.V. throat tremolo
mf ————— *p* ha - lu
fast vibrato fast vibrato
mf ————— *p* *mf* ————— *p* *subito* *fff*

Accord. fast vibrato cluster
mf ————— *p*

E. 4

|| ▲ 7 8 9 8

pp ————— *mp*
pp ————— *p*
pp ————— *pp*
pp ————— *pp*
pp ————— *pp*

9 8

Program 34:
 Countertenor range: Midi notes 54.5 and 63.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 15%
 Accordion: amplitude controls amplitude of shawm harmonizer = 5th below original tone
 Accordion: amplitude controls amplitude of accordion harmonizer = 5th above original tone
 Convolution routing: IR1:1, IR2:2, IR3: 3, IR4: 4, IR5: 5, IR6:6, IR7: 7, IR8:8

poco rall.

C. 15 *p* — *mf* — *pp* *mp > p* *mf > pp* *6:7:* *pp* — *ppp*

S. *p* — *mf* — *pp* *mp > p* *mp > pp* *pp > ppp*

Accord. *= ppp* *ppp* — *pp > ppp* *ppp* — *p* — *ppp* *6:7:* *ppp* — *ppp*

ppp < pp — ppp

The musical score consists of three staves. The top staff is for 'C.', the middle for 'S.', and the bottom for 'Accord.'. Measure 15 starts with a dynamic 'p' followed by a sustained note. The vocal parts then transition through 'mf' and 'pp'. The 'C.' part has lyrics 'kwod au di tis'. The 'S.' part has lyrics 'au di tis'. The 'Accord.' part has lyrics '= ppp' and 'ppp < pp — ppp'. The score includes various dynamics such as 'mp > p', 'mf > pp', 'pp > ppp', and 'ppp < mp > ppp'. It features time signature changes (9/8, 6/8, 7/4, 6:7, 3/4) and performance instructions like 'poco rall.' and 'au di tis'. There are also circular arrows with dots indicating specific performance techniques.

4 $\text{♩} = 144$ throat
tremolo*mf**p**p*>*pp*<*p**f*<*ff*

rall.

f

inhaled

V

V

3:2

V

$\text{♩} = 108$

22

C. p ————— f mf p mp pp \wedge |
 a u t lek - tis |
 S. pp ————— f pp mf p mp pp \wedge |
 Accord. pp mp pp $\rightarrow \odot$ $\rightarrow \odot$ mp p mp \wedge |
 $\rightarrow \odot$ pp mf pp $\rightarrow \odot$ $subito$ ppp \wedge |

24

C. *pp* ————— *mf* ————— *pp*
kwi - - - - - *bus* - - - - - *dam* - - - - - *ver* - - - - - *bis*

S. *pp* ————— *mp* ————— *pp* *pp* ————— *p* ————— *pp* ————— *mp* ————— *ppp*

Accord. { *pp* ————— *mp* ————— *pp* *ppp* ————— *p* ————— *pp* ————— *mp* ————— *ppp*

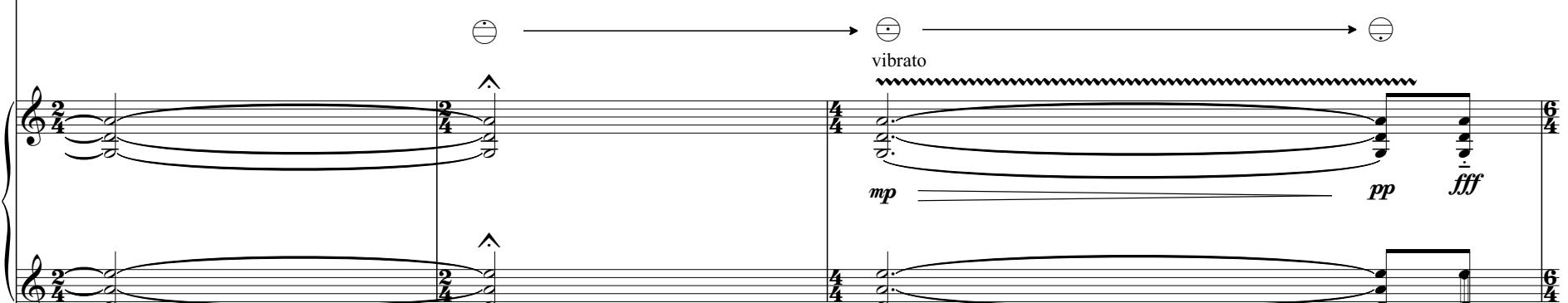
5

accel.

26

C. 

S. 

Accord. 

E. 

Program 36:
 Countertenor range: Midi notes 55.5 and 70
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 45%

5 Accordion: amplitude controls amplitude of shawm harmonizer = 5th below original tone
 Accordion: amplitude controls amplitude of accordion harmonizer = 5th above original tone
 Convolution routing: IR1:1, IR2:2, IR3: 3, IR4: 4, IR5: 5, IR6:6, IR7: 7, IR8:8

29 whispered *ppp* — *mf* — *mp* — *p* — *p* — *mp* *subito fff* *rall.*

C. ha ri *s* - *s* - *s* - *s* - *s* - *o* - *n*

S. - *mp* — *p* — *p* — *p* *subito fff*

A.V. whispered *ppp* — *mf* — *ppp*
 ha - ri *γ* - *^*

Accord. *ppp* — *pp* — *ppp* — *mp* — *p* — *p* — *p* *subito fff*

cluster
 (all always
 chromatic)

o: *subito ppp*

31 $\text{♩} = 108$

C. 6+7 8 re rum 5

S. 6+7 pp p mp pp 5

Accord.

12

accel.

C. *mf* *mp* — *mf* *p* — *mp*

S. *ppp* — *pp* — *pp* — *p* — *pp* — *pp* — *mp*

Accord. *ppp* — *pp* — *ppp* — *p* — *ppp* — *pp* — *mp* — *pp* — *pp* — *mf* — *pp* — *f* —

13

13

poco rall.

C. 35 *4:5* *mp < mf*
mu - r

S. *4:5* *pp*

Accord.

E.

6 *f < ff mp > p mp mf p*
15:16 *throat tremolo*
so - və - və - və - r - r - r - a

bisbigliando
15:16 *f < ff mp > p mp mf p*

vibrato
15:16 *f < ff p > pp mp mf p*

vibrato
15:16 *f < ff p > pp mp mf p*

Program 37:
 Counter tenor range: Midi notes 54.5 and 64.5
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 90%
 Accordion: amplitude controls amplitude of shawm harmonizer
 = 5th below original tone
 Convolution routing: IR1:1, IR2:2, IR3: 3, IR4: 4, IR5: 5, IR6:6, IR7: 7, IR8:8

$\text{♩} = 108$ **accel.**

throat tremolo

C. 37 mf — p ff — fff
 $\overbrace{\hspace{10em}}$ 7:8 ♩ $\overbrace{\hspace{1.5em}}$ 3:2 ♩ \wedge pp — mp — pp ppp — mf 6:7 ♩ — ppp
o — d — i — m — et — e — a — rum

S. bisbigliando
 mf — p ff — fff
 $\overbrace{\hspace{1.5em}}$ 3:2 ♩ \wedge pp — mp — ppp — mf — ppp
— 6:7 ♩ —

Accord.
fast vibrato
 mf — p ff — fff *subito ppp*
 $\overbrace{\hspace{1.5em}}$ 3:2 ♩ \wedge ppp — mp — ppp — mf — pp — mf =
fast vibrato
 $\overbrace{\hspace{1.5em}}$ 3:2 ♩ \wedge ppp — mf — pp — mf =

41

C. 6:8
kwas - dam - i - de - as

S. 6:8
mp > pp pp < mp mf ppp f p pp p

Accord. 6:8
ppp mf = p p - mf f mp pp

E. 6:8 cluster 9:8 9:8

Program 38:

Countertenor

Midi note range: 54.5- 64.5

Countertenor range: Midi notes 55.5 and 62.5

Pitch tracking: 0% - 360%

Timbre tracking: 0% - 135%

Accordion: amplitude controls amplitude of shawm harmonizer = 5th below original tone

Accordion: amplitude controls amplitude of accordion harmonizer = 5th above original tone

Convolution routing: IR1:1, IR2:2, IR3: 3, IR4: 4, IR5: 5, IR6:6, IR7: 7, IR8:8

43

C. *9+8* 8 *fo - - r* *ne - - -* *m - us*

S. *9:6* ♯ *12:17* ♯ *ppp f ppp*

A.V. *9+8* 8 *12:17* ♯ *mf ppp* *s*

Accord. *mp ppp f p* *9+8* *9+8* *9+8*

8

 $\text{d} = 144$ rall.

throat tremolo throat tremolo

f < ff mp > p ————— mp mf ————— p

15:16♪

C. 44 *sə və - və - və - r - r - r a*
bisbigliando

mf ————— p

7:8♪

ff ————— fff

3:2♪ 6:5♪

d - i - m

S. *f < ff mp > p ————— mp mf ————— p*

15:16♪

bisbigliando ,

mf ————— p

ff ————— fff

3:2♪

Accord. *vibrato*

15:16♪

f < ff p > pp ————— p mf ————— p

vibrato

15:16♪

f ————— p

ff ————— fff subito ppp

3:2♪ 6:5♪

E. *f pp*

ff ————— fff

3:2♪

ff ————— fff

6:5♪

Program 39:
Countertenor
Midi note range: 54.5- 71
Countertenor range: Midi notes 55.5 and 62.5
Pitch tracking: 0% - 360% Timbre tracking: 0% - 180%
Accordion: amplitude controls amplitude of shawm harmonizer = 5th below original tone
Accordion: amplitude controls amplitude of accordion harmonizer = 5th above original tone
Convolution routing: IR1:1, IR2:2, IR3: 3, IR4: 4, IR5: 5, IR6:6, IR7: 7, IR8:8

9

$\text{♩} = 90$ **accel.**

C. 47 $7+8$ $f \text{--- } p \text{--- } mf \text{--- } pp \text{--- } mp \text{--- } pp \text{--- } f \text{--- } p$

si mi les is

S. 7+8 $f \text{--- } pp \text{--- } fff \text{--- } pp \text{--- } f \text{--- } p \text{--- } ppp$

Accord. $7+8$ $ppp \text{--- } f \text{--- } ff \text{--- } pp \text{--- } f \text{--- } p \text{--- } f \text{--- } f$

49

C. *ff* — *pp* — *ff* — *pp* *ppp* — *fff* — *ppp* *subito fff* > *ppp*, *subito fff* > *ppp* *subito fff* — *mp*

S. *subito ff* — *pp* — *ff* — *pp* *ppp* — *fff* — *ppp* *subito fff* — *ppp* *subito fff* > *ppp* *subito fff* — *p*

ord.

$\text{♩} = 180$ rall.

C. 52 *p* *mp* *p* *pp*

S. *p* *mp* *p* bisbil.

Accord.

Detailed description: The musical score consists of three staves. The top staff is for the Cello (C), the middle for the Soprano (S), and the bottom for the Bass (Accord.). The tempo is marked as $\text{♩} = 180$ with the instruction 'rall.'. Dynamics are indicated by *p* (pianissimo), *mp* (mezzo-pianissimo), *pp* (pianississimo), and *ppp* (pianissississimo). The Cello staff contains lyrics: 'i', 'ma', 'gi', 'na', 'mur'. The Soprano staff begins with a dynamic *p*, followed by *mp*, then *p*. It ends with a fermata over the last note and a repeat sign. The Bass staff shows harmonic progression through various chords, starting with a C major chord and moving through other chords like G major and D major. The page number 20 is located at the top left, and the title 'Ex Signis 23 October 2022' is at the top center.

53

C. **9+6** 8 **15** 8

S. **9+6** 8 **15** 8

Accord.

bisbil. bisbil.

f *ppp*

ppp

15 8 **15** 8

VI. Dei attributorum

Dániel Péter Biró

1 $\text{♩} = 72$ **accel.**

Lips: $\ominus \rightarrow \odot$ vocal fry inhaled $\ominus \rightarrow \odot$ vocal fry inhaled

Tongue: $2\text{[}\text{]} \rightarrow 1\text{[}\text{]}$ **subito** $f < ff$ $ppp < pp > ppp$ "fff" "f" "ff"

Countertenor 7:8 8:8 9:8 8:8

Shawm take off reed! 7:8 8:8 9:8 8:8

Accordion 7:8 8:8 9:8 8:8

Electronics 7:8 8:8 9:8 8:8

Program 40:
 Countertenor range: Midi notes 30 and 120
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 15%
 Convolution routing: IR1:1, 2, 3, 4, 5, 6, 7, 8

Program 41:
 Countertenor range: Midi notes 30 and 120
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 15%
 Convolution routing: IR1:1, 2, 3, 4,
 IR2: 5, 6, 7, 8

$\text{♩} = 108 \quad \text{rall.}$

6

Ct. $\frac{8}{8}$ fff " f " fff " fff " f " fff " $p > pp < p$ $\frac{6+6}{8}$ fff $ppp < pp > ppp$ $\frac{5}{8}$

S. $\frac{8}{8}$ fff " ff " fff " ff " fff " $\frac{6+6}{8}$ fff " $pri - \epsilon - ta$ $\frac{5}{8}$

Accord. $\frac{8}{8}$ pp p $p > pp < p$ $\frac{6+6}{8}$ $ppp < pp > ppp$ $\frac{5}{8}$

air (without reed) $\frac{5:4}{\text{♩}}$ air (without reed) $\frac{5:4}{\text{♩}}$ air (without reed) $\frac{5:4}{\text{♩}}$

vocal fry $\frac{5:4}{\text{♩}}$ vocal fry $\frac{5:4}{\text{♩}}$ $\frac{subito}{3}$ $\frac{5:6}{\text{♩}}$ $\frac{5:6}{\text{♩}}$

open air valve bellow noise $\frac{5:6}{\text{♩}}$ $\frac{5:6}{\text{♩}}$

10

Ct. *mf > p > pp < p* *subito* *f* *ff f < ff* *p > pp < p* *mp > p*

S. *whispered p > pp < p* *9:10♪* *tu-m-i-d-e-as* *inhaled over keyhole f < ff* *air (without reed) mp > p* *9:7♪*

Accord. *open air valve bellow shake p - pp* *9:10♪* *pp - p* *bellow noise p > pp < p* *key noise 9:7♪* *open air valve bellow noise f -* *9:7♪*

$\text{♪} = 72$ **accel.**

3

vocal fry inhaled vocal fry inhaled

whispered subito *p* > *pp* < *p* *ff* *pp* *f* < *ff* *ppp* < *pp* = *ppp* "fff" "f" "ff"

14 15:14:1 7:4:1 9:8:1

Ct. S. A. Voice Accord.

whispered *ppp* < *pp*

dε - ni - kwe

inhaled over keyhole 7:4:1 *f*

"f" < "ff" *p* < *mp* e - o

ε - k - s Bellow Noise 9:8:1

"p"

Program 42:
Countertenor range: Midi notes 30 and 120
Pitch tracking: 0% - 360%
Timbre tracking: 0% - 15%
Convolution routing: IR1:1, 2, 3,
IR2: 4, 5, 6, IR3: 7, 8

$\text{♩} = 144$ **rall.**

Program 43:

- Counter tenor range: Midi notes 30 and 120
- Pitch tracking: 0% - 360%
- Timbre tracking: 0% - 15%
- Accordion: amplitude controls amplitude of accordion harmonizer = tritone above original tone
- Convolution routing: IR1:1, 2, IR2: 3, 4, IR3: 5, 6 IR4: 7, 8

5

vocal fry

throat tremolo

subito

"fff" *ppp < pp > ppp pp ppp* *p > pp < p*

22

Ct. **12** **5:6** **5:6** **9:10**

S. **12** **5:6** **5:6**

A. Voice **12** **5:6** **5:6**

Accord. **12** **5:6** **5:6**

Elect. **12** **5** **10** **7** **5**

vocal fry

throat tremolo

subito

"f" *fff* "f" *f < ff* "ff" "f" *ff* "ff"

inhaled

inhaled

"p" *p > pp < p mp > ppp*

whispered

"p" *p > pp < p mp > ppp*

inhaled over keyhole

"f" "ff" "f" "ff"

put on reed

bellow noise

bellow shake

bellow noise

bellow noise

bellow shake

Program 44:
Countertenor range:
Midi notes 30 and 120
Pitch tracking: 0% - 360%
Timbre tracking: 0% - 15%
Convolution routing: IR1:1,
IR2: 2, 3 IR3: 4,5 IR4: 6,7 IR5:8

$\text{♩} = 72$ rall.

6 sung $\text{ppp} < \text{pp} > \text{ppp}$ $f \rightarrow ff$

Ct. 5/8 27 13:10♪ 4/8 1/8 2/8 8/8 13:8♪ 2/8 5:4♪

S. 5/8 13:10♪ 4/8 $\text{mf} > \text{mp}$ 8/8 inhaled over key hole 13:8♪ 2/8 $"ff" > "f"$

A. Voice 5/8 $\text{f} \geq p$ 4/8 hun-k 8/8 $"f"$ ff 2/8 ε - t

Accord. 5/8 at - kwe 4/8 1/2 open air valve 1/2 bellow noise 8/8 ra-tsi - o - nem 2/8 open air valve bellow shake

Elec. 5/8 4/8 8/8 2/8 5:4♪ 8/8 7/8

Program 45:
 Counter tenor range: Midi notes 30 and 120
 Pitch tracking: 0% - 360%
 Timbre tracking: 0% - 30%
 Accordion: amplitude controls amplitude of shwam harmonizer = minor 2nd above original tone
 Convolution routing: IR1:1,
 IR2: 2 IR3: 3 IR4: 4,5 IR5:6,7 IR6:8

♩ = 54

31

vocal fry → ①
3 1 → 1 2

p > pp < p fff > ppp

throat tremolo → ①
1 2 → 2 3

mf → p "fff"
~~~~~

vocal fry → ①  
1 2 → 2 3

"fff"  
~~~~~

vocal fry → ①
1 2 → 2 3

f → ff
~~~~~

inhaled → ①  
1 2 → 2 3

sung → ①  
1 2 → 2 3

15:14 ♩

8:7 ♩

8:11 ♩

6:8 ♩

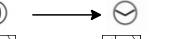
Ct. 7/8 x b x b (x) x | 7/8 x | 11/8 x | 6/8 o → a → o |  
s - ε-k-u-n-d

S. 7/8 x x x x x x | 7/8 x | 11/8 x x x x | 6/8 |  
air sound (without reed) put on reed  
15:14 ♩ 8:7 ♩ 5:4 ♩ 6:8 ♩

A. Voice 7/8 x x x x | 7/8 x | 11/8 x | 6/8 |  
mf < f 3:2 ♩ mf > mp 3:2 ♩ ff > pp 3:2 ♩  
sε - kun - di gε ne - ris vo - ka - bo  
15:14 ♩ 8:11 ♩ 6:8 ♩

Accord. 7/8 x x x x | 7/8 x | 11/8 x | 6/8 |  
ppp → mp → pp ppp → p pp → ppp ff  
6:7 ♩ 8:11 ♩ 6:8 ♩

7       $\text{♪} = 54$     **accel.**

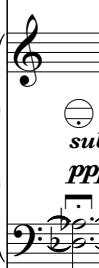
**sung**  
  
 $2\text{□} \rightarrow 4\text{□}$   
 **$ppp < pp > ppp$**

**inhaled**  
  
 $1\text{□} \rightarrow 2\text{□}$   
 **$ff > pp$**

**throat tremolo**  
 **$mp$**    **$pp$**   
 $\text{o} \rightarrow \varepsilon \rightarrow i \rightarrow g$

**Ct.** 

**S.** 

**Accord.** 

**Elec.** 

**Program 46:**  
 Counter tenor range: Midi notes 30 and 120  
 Pitch tracking: 0% - 360%  
 Timbre tracking: 0% - 45%  
 Accordion: amplitude controls amplitude of accordion harmonizer = 5th above original tone  
 Convolution routing: IR1:1,  
 IR2: 2 IR3: 3 IR4: 4 IR5:5 IR6:6 IR7: 7,8

8

39      *ppp* < *p*      *pp* > *ppp* < *pp*

Ct. *en - nε - ra*      *a - l - i - ud*      *si - εn*      *tsi - am*      *in - tu - i - ti*      *va - m at -*

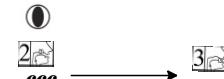
S. *whispering*  
*pp* > *ppp* < *pp*      7:5♪      5:4♪      11:9♪  
*gε - nε - ra da-tur ut*      *ff* > *pp*      *pp* > *ppp* < *pp*

Accord.  
*ppp*      *pp*      *ff*      *mp* > *ppp*      *ppp* < *pp*  
*ppp* < *pp* > *ppp*

Elec.      5      8      2      9      4      9

<img alt="Musical score for four voices (Ct., S., Accord., Elec.) and one electronic track. The score is in 8 measures. Measure 39 starts with dynamic ppp and pp. The vocal parts sing lyrics: en-nε-ra, a-l-i-ud, si-εn, tsi-am, in-tu-i-ti, va-m at-. The soprano part has a whispering dynamic. Measures 40-41 show dynamic changes between pp, ppp, and ff. Measures 42-43 show dynamics mp and tr. Measures 44-45 show dynamics ppp and pp. Measures 46-47 show dynamics ppp and pp. Measures 48-49 show dynamics ppp and pp. Measures 50-51 show dynamics ppp and pp. Measures 52-53 show dynamics ppp and pp. Measures 54-55 show dynamics ppp and pp. Measures 56-57 show dynamics ppp and pp. Measures 58-59 show dynamics ppp and pp. Measures 60-61 show dynamics ppp and pp. Measures 62-63 show dynamics ppp and pp. Measures 64-65 show dynamics ppp and pp. Measures 66-67 show dynamics ppp and pp. Measures 68-69 show dynamics ppp and pp. Measures 70-71 show dynamics ppp and pp. Measures 72-73 show dynamics ppp and pp. Measures 74-75 show dynamics ppp and pp. Measures 76-77 show dynamics ppp and pp. Measures 78-79 show dynamics ppp and pp. Measures 80-81 show dynamics ppp and pp. Measures 82-83 show dynamics ppp and pp. Measures 84-85 show dynamics ppp and pp. Measures 86-87 show dynamics ppp and pp. Measures 88-89 show dynamics ppp and pp. Measures 90-91 show dynamics ppp and pp. Measures 92-93 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**Program 47:**  
 Counter tenor range: Midi notes 30 and 120  
 Pitch tracking: 0% - 360%  
 Timbre tracking: 0% - 60%  
 Accordion: amplitude controls amplitude of accordion harmonizer = 5th above original tone  
 Convolution routing: IR1:1,  
 IR2: 2 IR3: 3 IR4: 4 IR5:5 IR6:6 IR7: 7, IR8: 8

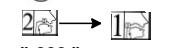
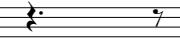
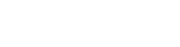
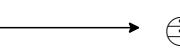
vocal fry  


Ct. 44 *ppp* < *pp*      *fff* → *ppp*  
*kwe*      17:18♪

*p* > *pp* < *mp*    *mp* > *p* < *mp*    *"fff"* > *"f"*  
*a - b i*      *de - a*      *d - e i*

S.      *molto vib.*  
*p* → *ppp*  
*ff* = *ppp*      *pp* → *ppp* < *mp*      *pp* → *ppp*

Accord.  
*subito*      *mf* → *ppp* < *ppp* > *ppp*      *pp* > *ppp* < *pp*      *ppp* → *mp*      *subito*      *ppp* → *ppp* < *pp*

17:18♪        
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  


48

Ct.

vocal fry  
d e → i  
(h)

S.

$\text{p} \xrightarrow{3:2} \text{f}$

Accord.

vocal fry  
inhaled  
(h)  
i

Detailed description: The musical score consists of four systems of music. The first system (measures 48) features the Cello (Ct.), Soprano (S.), and Accordion (Accord.). The Cello has dynamic markings *mf*, *ppp*, *mf*, *mp*, *ff*, *mp*, *ppp*, *f*, *mf*, *ff*, *mf*. The Soprano uses vocal fry and inhaled breath, with dynamics *ppp*, *mf*, *p*, *f*, *mp*, *ppp*, *mf*, *subito ppp*, *subito f*, *subito ppp*. The Accordion part consists of sustained chords. Measure 48 concludes with a fermata over the piano. The second system begins with a piano introduction followed by the vocal entries. The vocal parts continue with dynamic changes and vocal techniques like vocal fry and inhaled breath. The piano part provides harmonic support with sustained chords.

♩ = 108 **rall.**

13

**vocal fry**

**inhaled**

**subito**

**Ct.**

**S.**

**Accord.**

9

$\text{♩} = 72$  **rall.**

$\text{♪} = 36$