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Saxophone without mouthpiece

Kahl, D.P.

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Personal Audio and Video Performance Repository

The recordings listed below constitute artistic output over the course of several years. This work also includes several of my colleagues across two professional ensembles, namely the Ensemble du Bout du Monde (with current members Noa Mick, Simona Castria, and Salvatore Castellano and former members Kay Zhang, Pablo de la Fuente, and Quentin Darricau) and Duo Entre-Nous (with Jackie Glazier). Commissioned works are marked as such. All recordings are publicly available and several, where applicable, are released on full-length albums.

Solo Works:

For Felipe M. (Commissioned Work) - Stratis Minakakis

Live Performance - https://youtu.be/LFIH1_ay-Ds?si=ZsA6B_GFKiR5aXOh

Video Recording - <https://youtu.be/jpf7mYXNFo8?si=EtxGI5R8fam3GcTQ>

Audio Recording - https://youtu.be/-OEExoe_Zhng?si=MwcoPd3qtexnGJAg

Go Within (Commissioned Work) - Eleni Ralli

Live Performance - <https://youtu.be/GwaisJoHlbo?si=ZwgIQ9jV93B7xPqc>

Score Follower - https://youtu.be/bBrJ3atAN_U?si=9ah3CI7XDldwg_B-

Audio Recording - <https://youtu.be/dyReFcxa1jo?si=UnzAftOsOERihft7>

el gran cabrón - Germán Alonso

Live Performance - https://youtu.be/n20_dNZ6dl?si=ckqx1e2Gf3NbyvrU

Vision (Urban Music II) - Rainer Rubbert

Live Performance - https://youtu.be/4kGjvI3jPeo?si=vMOqjbR_8ABeut-2

Sikuri I - Juan Arroyo

Live Performance - <https://on.soundcloud.com/q8u7EUn5yBYHCbJTA>

Saxophone and Clarinet Duo Works:

Anemoi Dances (Commissioned Work) - Max Grafe

Live Performance - <https://youtu.be/3NCnuS-bpQI?si=Ybk7rO3oT3IwGo-G>

Audio Recording - <https://youtu.be/6KkkXokRcQM?si=Vczq3wapcqjq048Q>

Air Mirrors (Commissioned Work) - María Eugenia Luc

Live Performance - https://youtu.be/tb-L-iCNHP8?si=ZYGnpXNa8Hr2H_KU

Audio Recording - <https://youtu.be/LEKmaGyb1uk?si=har1eikd0RaWYirx>

Saxophone Quartet Works:

Irrational (Commissioned Work) - Chaya Czernowin

Live Performance - <https://youtu.be/Wu-YuG71IU?si=jwsdXrGcmoV2vxpY>

Zeruan (Commissioned Work) - María Eugenia Luc

Video Recording - https://youtu.be/2iLGqOVbDKo?si=2_TjfliE-UiHEoVq

Live Performance - <https://youtu.be/QTkZtkTPk9A?si=0YVVxd1DC6AdTyFU>

Audio Recording -

<https://open.spotify.com/track/3IvkXj2EXZNM8UMC8gVIYF?si=a970f2b407424fc9>

Thalassografie A (Commissioned Work) - Stratis Minakakis

Live Performance - <https://youtu.be/HGuD4farJV8?si=u-3lxy9T6FFT1hrr>

Jalkin - Ramon Lazcano

Video Performance - <https://youtu.be/hWIwCkqyOQ?si=920iEjxkPWXeDtlW>

Live Performance - <https://youtu.be/KT1DNvbHwQA?si=AS4xItF-0lHLmB3w>

Der Blutige Schaffner - Robin Hoffmann

Video Performance - <https://youtu.be/SNG8IsSWeiI?si=mrGQhvPFkFAred4O>

Live Performance - <https://youtu.be/CAdLtBwiEUc?si=8mPoUQrd5olhrzFc>

YUN - María Eugenia Luc

Video Performance - https://youtu.be/Wr8ddjdxkIE?si=g0-JTBLOdSY_0cTS

Albums Released with SWMP Techniques:

Go Within - Don-Paul Kahl -

<https://open.spotify.com/album/10Vot3tfTYGGNsV59MgqN?si=SDh0mD1cTKyEcfSSUaabYg>

Fresh Ink - Duo Entre-Nous -

<https://open.spotify.com/album/0eK1Er9KC6q7iWFzU0wE4r?si=iKxx1LgmRRSh5xiqw7I9iA>

María Eugenia Luc - Solo & Chamber Music -

<https://open.spotify.com/album/7zmKxJmpUuu42BBdkd0Sel?si=x46CewXpTD6vWo42NwgR4A>

Pitch Manual

Recording Method

All recordings that are part of this manual were made on the 10th of March 2022 in the recording studios at the Koninklijk Conservatorium Den Haag with sound engineer Pablo Gastaldello. Recordings can be accessed at the following webpages:

Air Pitch:

<https://www.saxowithoutmouthpiece.com/pitch-manual/air-pitch/>

Tongue Ram:

<https://www.saxowithoutmouthpiece.com/pitch-manual/tongue-ram/>

Trumpet Sounds:

<https://www.saxowithoutmouthpiece.com/pitch-manual/trumpet-sounds/>

Saxo-Flute Hybridity:

<https://saxowithoutmouthpiece.com/pitch-manual/saxo-flute-hybridity/>

Materials:

- Two Neumann KM184 paired microphones were placed about 2 meters from the saxophone.
- One Neumann U87 microphone was placed about 1.5 meters from the saxophone.
- Focusrite RedNet2 with a Solid State Logic (SSL) XLogic VHD Pre preamp was used for audio recording.
- Reaper recording software was used to record raw material.
- Sonic Visualizer with the YIN plugin. YIN is a vamp implementation of the Yin algorithm for monophonic frequency estimation. It is used to analyze the fundamental frequencies of single monophonic pitches and was developed by Matthias Mauch and Simon Dixon.

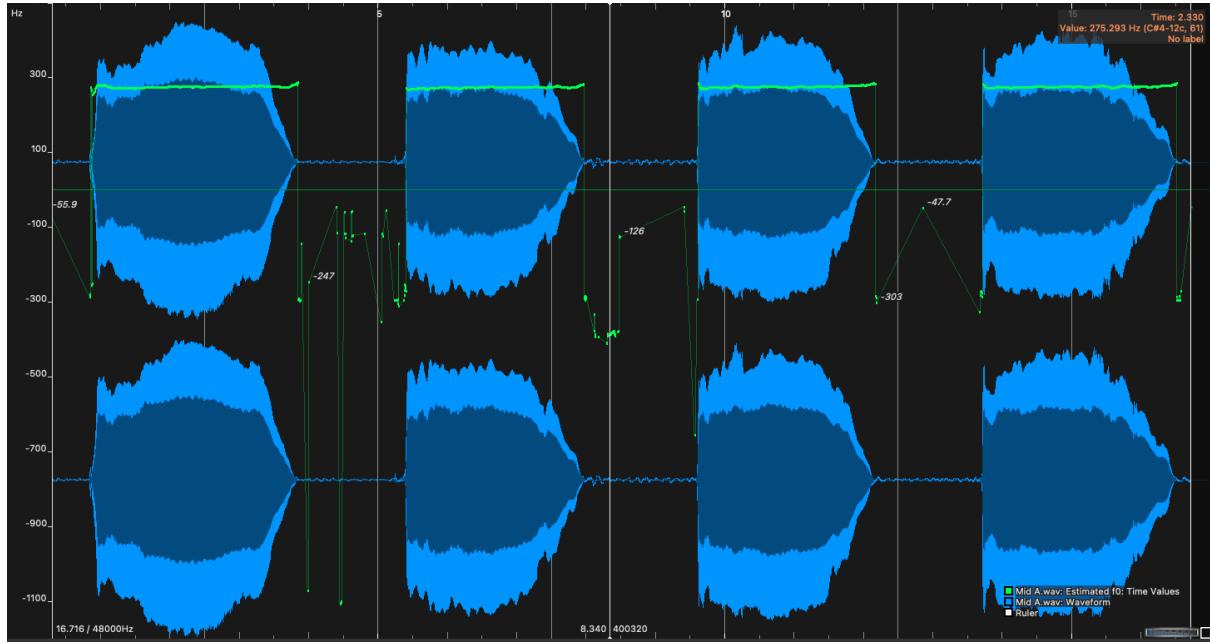


Saxophone Models Used in this Study:

- Soprano Saxophone - Henri Selmer Paris - Super Action 80 Series III - Solid Silver Neck
- Alto Saxophone - Henri Selmer Paris - Supreme - Lacquered Neck
- Tenor Saxophone - Henri Selmer Paris - Super Action 80 Series III - Solid Silver Neck
- Baritone Saxophone - Henri Selmer Paris - Super Action 80 Series II - Lacquered Neck

Methodological Steps:

1. Recordings were made of each individual note produced by the four saxophones without mouthpiece. For the sake of this study only the standard fingerings were used. No alternate, eighth-tone, quarter-tone, or multiphonic fingerings were used. (However, these can be integrated through a future study).
2. Four to six test recordings were made to ensure accuracy of the material.
3. Each note was examined in Sonic Visualizer using the YIN plugin. Below you can see a screenshot from Sonic Visualizer with its pitch analyses.



4. This material was analyzed and a hertz value was extracted for each of the four test pitches.
5. This value was confirmed by ear with a pure sine wave of the same value to ensure accuracy. This step was important: despite being powerful software, it is not infallible and it is only a tool to aid in analysis. Everything had to be tested through the software and then confirmed aurally.
6. The recorded hertz values of all four tests were combined to create an average hertz value. The standard deviation was also calculated in order to understand the variability between the individual tests. This statistic shows how unstable the pitch result for a specific fingering might be.
7. The average hertz value was tested by ear with a pure sine wave of the same hertz value.
8. The average hertz value was converted to the precise musical pitch using the following formula:

$$m_p = 12 * \log_2 \left(\frac{f_0}{440\text{Hz}} \right) + 69$$

where m_p is the musical pitch and f_0 is the frequency of the individual averaged pitch.

9. This formula gives the MIDI number which represents the closest tempered semitone, plus how far out of tune this pitch is from that semitone.
10. I converted this pitch value to the nearest eighth-tone.
11. From the nearest eighth-tone value, I converted this to musical notation.

Accidentals

Below are the eighth-tone and quarter-tone accidental signs used in this study.

| | |
|----------------------------------|------------------------|
| sharpened by an eighth-tone | ↑ ♯ ↑ ₪ |
| sharpened by a quarter-tone | ♯ |
| sharpened by three quarter-tones | ## |
| lowered by an eighth-tone | ↓ ♭ ↓ ₪ |
| lowered by a quarter-tone | ♭ |
| lowered by three quarter-tones | ♭ |

Pitch Manual for Air Pitch:

| Soprano Saxophone | | | | | | | |
|----------------------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------------|
| Fingering | Test 1 (Hz) | Test 2 (Hz) | Test 3 (Hz) | Test 4 (Hz) | Average (Hz) | Std Dev (Hz) | Musical Notation |
| A#3 / Bb3 | 255.95 | 254.347 | 256.79 | 254.45 | 255.38425 | 1.19 | C4 minus 42 cents |
| B3 | 263.9 | 266.47 | 261.6 | 259.22 | 262.7975 | 3.11 | C4 plus 8 cents |
| C4 | 288.4 | 287.84 | 296.86 | 288.21 | 290.3275 | 4.36 | D4 minus 20 cents |
| C#4 / Db4 | 323.32 | 326.76 | 326.9 | 326.14 | 325.78 | 1.67 | E4 minus 20 cents |
| D4 | 348 | 338.22 | 330.04 | 345.31 | 340.3925 | 8.04 | F4 minus 44 cents |
| D#4 / Eb4 | 355.59 | 358.52 | 357.04 | 357.95 | 357.275 | 1.28 | F4 plus 39 cents |
| E4 | 388.46 | 401.98 | 404.39 | 400.44 | 398.8175 | 7.09 | G4 plus 30 cents |
| F4 | 432.61 | 433.08 | 432.07 | 433.47 | 432.8075 | 0.60 | A4 minus 29 cents |
| F#4 / Gb4 | 458.41 | 457.42 | 458.64 | 461.97 | 459.11 | 1.98 | A#4 minus 26 cents |
| G4 | 501.38 | 503.65 | 508.82 | 503.67 | 504.38 | 3.15 | B4 plus 36 cents |
| G#4 / Ab4 | 555.67 | 547.41 | 534.45 | 543.24 | 545.1925 | 8.83 | C#5 minus 29 cents |
| A4 | 583.11 | 593.51 | 597.32 | 601.65 | 593.8975 | 7.92 | D5 plus 19 cents |
| A#4 / Bb4 | 641.94 | 640.94 | 635.21 | 640.46 | 639.6375 | 3.02 | D#5 plus 48 cents |
| B4 | 684.08 | 693.18 | 683.77 | 685.49 | 686.63 | 4.43 | F5 minus 30 cents |
| C5 | 738.45 | 727.86 | 746.1 | 700.19 | 728.15 | 20.08 | F#5 minus 28 cents |
| C#5 / Db5 | 811.58 | 817.63 | 813.01 | 815.47 | 814.4225 | 2.67 | G#5 minus 34 cents |
| D5 (with palm keys) | 846.19 | 844.32 | 846.53 | 850.27 | 846.8275 | 2.49 | G#5 plus 33 cents |
| D#5 / Eb5 (with palm keys) | 932.5 | 936.31 | 937.87 | 939.72 | 936.6 | 3.07 | A#5 plus 8 cents |
| E5 (with palm keys) | 992.2 | 973.01 | 934.33 | 1054.45 | 988.4975 | 50.12 | B5 plus 1 cent |
| F5 (with palm keys) | 1064.39 | 1094.39 | 1118.2 | 1099 | 1093.995 | 22.27 | C#6 minus 23 cents |
| F#5 / Gb5 (with palm keys) | 1127.5 | 1119.84 | 1108.34 | 1160.52 | 1129.05 | 22.41 | C#6 plus 31 cents |
| G5 (with palm keys) | 1224.49 | 1316.4 | 1338.24 | 1234.2 | 1278.3325 | 57.40 | D#6 plus 46 cents |

| Alto Saxophone | | | | | | | | |
|----------------------------|-----------|-------------|-------------|-------------|-------------|--------------|-------------|--------------------|
| | Fingering | Test 1 (Hz) | Test 2 (Hz) | Test 3 (Hz) | Test 4 (Hz) | Average (Hz) | St Dev (Hz) | Musical Notation |
| A#3 / Bb3 | 164.4 | 165.11 | 164.93 | 164.02 | 164.615 | 0.50 | | E3 minus 2 cents |
| B3 | 186.94 | 187.82 | 191.03 | 182.47 | 187.065 | 3.53 | | F#3 plus 19 cents |
| C4 | 197.64 | 201.5 | 199.12 | 193.69 | 197.9875 | 3.28 | | G3 plus 17 cents |
| C#4 / Db4 | 210.37 | 211.82 | 209.11 | 212.71 | 211.0025 | 1.59 | | G#3 plus 28 cents |
| D4 | 220.55 | 232 | 229.54 | 228.76 | 227.7125 | 4.97 | | A#3 minus 40 cents |
| D#4 / Eb4 | 231.01 | 246.72 | 247.71 | 248.57 | 243.5025 | 8.36 | | B3 minus 24 cents |
| E4 | 262.41 | 262.81 | 263.33 | 259.28 | 261.9575 | 1.82 | | C4 plus 2 cents |
| F4 | 272.82 | 280.57 | 274.89 | 282.06 | 277.585 | 4.43 | | C#4 plus 3 cents |
| F#4 / Gb4 | 309.58 | 287.88 | 309.17 | 309.53 | 304.04 | 10.77 | | D#4 minus 40 cents |
| G4 | 318.18 | 320.3 | 320.8 | 323.98 | 320.815 | 2.40 | | E4 minus 47 cents |
| G#4 / Ab4 | 356.49 | 351.32 | 353.45 | 353.67 | 353.7325 | 2.12 | | F4 plus 22 cents |
| A4 | 392.93 | 392.42 | 388.25 | 391.68 | 391.32 | 2.11 | | G4 minus 3 cents |
| A#4 / Eb4 | 416.14 | 419.22 | 417.37 | 415.3 | 417.0075 | 1.70 | | G#4 plus 7 cents |
| B4 | 443.64 | 442.04 | 443.25 | 444.16 | 443.2725 | 0.90 | | A4 plus 13 cents |
| C5 | 496.71 | 493.31 | 497.46 | 496.74 | 496.055 | 1.86 | | B4 plus 8 cents |
| C#5 / Db5 | 539.72 | 532.75 | 534.05 | 535.93 | 535.6125 | 3.03 | | C5 plus 40 cents |
| D5 (with palm keys) | 559.09 | 571.61 | 578.76 | 562.34 | 567.95 | 8.95 | | C#5 plus 42 cents |
| D#5 / Eb5 (with palm keys) | 613.47 | 613.3 | 614.02 | 613.78 | 613.6425 | 0.32 | | D#5 minus 24 cents |
| E5 (with palm keys) | 630.95 | 628.68 | 630 | 630.54 | 630.0425 | 0.99 | | D#5 plus 22 cents |
| F5 (with palm keys) | 690.89 | 684.48 | 692.9 | 692.21 | 690.12 | 3.85 | | F5 minus 21 cents |
| F#5 / Gb5 (with palm keys) | 746.54 | 742.82 | 742.61 | 743.17 | 743.785 | 1.85 | | F#5 plus 9 cents |

| Tenor Saxophone | | | | | | | | |
|----------------------------|-----------|-------------|-------------|-------------|-------------|--------------|-------------|--------------------|
| | Fingering | Test 1 (Hz) | Test 2 (Hz) | Test 3 (Hz) | Test 4 (Hz) | Average (Hz) | St Dev (Hz) | Musical Notation |
| A#3 / Bb3 | 121.73 | 123.03 | 122.16 | 122.31 | 122.3075 | 0.54 | | B2 minus 16 cents |
| B3 | 131.12 | 131.92 | 133.37 | 131.13 | 131.885 | 1.06 | | C3 plus 14 cents |
| C4 | 137.78 | 137.82 | 136.83 | 139.36 | 137.9475 | 1.05 | | C#3 minus 8 cents |
| C#4 / Db4 | 154.12 | 152.07 | 153.09 | 153.04 | 153.08 | 0.84 | | D#3 minus 28 cents |
| D4 | 166.55 | 167.75 | 166.27 | 164.3 | 166.2175 | 1.43 | | E3 plus 15 cents |
| D#4 / Eb4 | 172.59 | 172.64 | 172.45 | 173.42 | 172.775 | 0.44 | | F3 minus 18 cents |
| E4 | 180.21 | 181.53 | 181.11 | 180.44 | 180.8225 | 0.61 | | F#3 minus 40 cents |
| F4 | 205.14 | 204.98 | 203.59 | 202.6 | 204.0775 | 1.21 | | G#3 minus 30 cents |
| F#4 / Gb4 | 220.28 | 224.18 | 224.66 | 223.26 | 223.095 | 1.96 | | A3 plus 24 cents |
| G4 | 232.58 | 232.51 | 233.33 | 231.98 | 232.6 | 0.56 | | A#3 minus 4 cents |
| G#4 / Ab4 | 255 | 254.13 | 254.08 | 254.12 | 254.3325 | 0.45 | | C4 minus 49 cents |
| A4 | 273.65 | 273.75 | 273.39 | 272.79 | 273.395 | 0.43 | | C#4 minus 24 cents |
| A#4 / Eb4 | 295.75 | 295.63 | 294.6 | 295.09 | 295.2675 | 0.53 | | D4 plus 9 cents |
| B4 | 317.25 | 316.38 | 317.78 | 318.24 | 317.4125 | 0.80 | | D#4 plus 35 cents |
| C5 | 358.56 | 355.99 | 357.17 | 360.98 | 358.175 | 2.14 | | F4 plus 44 cents |
| C#5 / Db5 | 375.12 | 375.12 | 374.81 | 375.45 | 375.125 | 0.26 | | F#4 plus 24 cents |
| D5 (with palm keys) | 414.23 | 414.99 | 414.33 | 414.31 | 414.465 | 0.35 | | G#4 minus 4 cents |
| D#5 / Eb5 (with palm keys) | 439.87 | 440.55 | 440.73 | 441.13 | 440.57 | 0.53 | | A4 plus 2 cents |
| E5 (with palm keys) | 473.93 | 474.85 | 475.28 | 473.53 | 474.3975 | 0.81 | | A#4 plus 30 cents |
| F5 (with palm keys) | 523.59 | 523.66 | 523.28 | 524.01 | 523.635 | 0.30 | | C5 plus 1 cent |
| F#5 / Gb5 (with palm keys) | 557.53 | 558.3 | 554.72 | 554.86 | 556.3525 | 1.83 | | C#5 plus 6 cents |

| Baritone Saxophone | | | | | | | |
|----------------------------|-------------|-------------|-------------|-------------|--------------|-------------|--------------------|
| Fingering | Test 1 (Hz) | Test 2 (Hz) | Test 3 (Hz) | Test 4 (Hz) | Average (Hz) | St Dev (Hz) | Musical Notation |
| A3 | 74.6 | 74.95 | 74.7 | 74.87 | 74.78 | 0.16 | D2 plus 32 cents |
| A#3 / Bb3 | 82.47 | 80.09 | 80.5 | 80.55 | 80.9025 | 1.07 | E2 minus 32 cents |
| B3 | 85.9 | 86.14 | 86.03 | 86.24 | 86.0775 | 0.15 | F2 minus 25 cents |
| C4 | 91.61 | 90.93 | 91.35 | 92.68 | 91.6425 | 0.75 | F#2 minus 16 cents |
| C#4 / Db4 | 101.36 | 101.83 | 101.97 | 100.74 | 101.475 | 0.56 | G#2 minus 40 cents |
| D4 | 111.22 | 112.29 | 111.37 | 111.46 | 111.585 | 0.48 | A2 plus 25 cents |
| D#4 / Eb4 | 117.89 | 117.12 | 117.68 | 116.58 | 117.3175 | 0.59 | A#2 plus 11 cents |
| E4 | 124.41 | 127.2 | 123.37 | 122.33 | 124.3275 | 2.09 | B2 plus 12 cents |
| F4 | 131.75 | 130.16 | 130.81 | 130.57 | 130.8225 | 0.67 | C3 plus 0 cents |
| F#4 / Gb4 | 143.71 | 143.91 | 144.86 | 143.65 | 144.0325 | 0.56 | D3 minus 33 cents |
| G4 | 153.72 | 155.02 | 153.6 | 153.52 | 153.965 | 0.71 | D#3 minus 18 cents |
| G#4 / Ab4 | 165.06 | 166.12 | 165.06 | 167.37 | 165.9025 | 1.10 | E3 plus 11 cents |
| A4 | 183.54 | 181.89 | 183.36 | 183.49 | 183.07 | 0.79 | F#3 minus 18 cents |
| A#4 / Eb4 | 190.29 | 190.75 | 192.15 | 191.76 | 191.2375 | 0.86 | G3 minus 43 cents |
| B4 | 211.42 | 207.71 | 210.24 | 211.15 | 210.13 | 1.69 | G#3 plus 21 cents |
| C5 | 227.33 | 226.4 | 228.54 | 224.78 | 226.7625 | 1.59 | A#3 minus 48 cents |
| C#5 / Db5 | 247.12 | 247.75 | 248.39 | 248.49 | 247.9375 | 0.64 | B3 plus 7 cents |
| D5 (with palm keys) | 260.15 | 258.68 | 259.02 | 258.8 | 259.1625 | 0.67 | C4 minus 16 cents |
| D#5 / Eb5 (with palm keys) | 276.21 | 278.22 | 276.84 | 277.45 | 277.18 | 0.86 | C#4 plus 0 cents |
| E5 (with palm keys) | 299.49 | 298.62 | 298.52 | 299.69 | 299.08 | 0.60 | D4 plus 32 cents |
| F5 (with palm keys) | 320.03 | 320.29 | 320.44 | 320.09 | 320.2125 | 0.19 | D#4 plus 50 cents |
| F#5 / Gb5 (with palm keys) | 349.98 | 348.86 | 349.73 | 349.54 | 349.5275 | 0.48 | F4 plus 1 cent |

Pitch Manual for Tongue Ram:

| Soprano Saxophone | | | | | | | |
|----------------------------|-------------|-------------|-------------|-------------|--------------|-------------|--------------------|
| Fingering | Test 1 (Hz) | Test 2 (Hz) | Test 3 (Hz) | Test 4 (Hz) | Average (Hz) | St Dev (Hz) | Musical Notation |
| A#3 / Bb3 | 222.63 | 221.28 | 222.63 | 222.42 | 222.24 | 0.65 | A3 plus 18 cents |
| B3 | 232.41 | 232.33 | 231.37 | 233.08 | 232.2975 | 0.70 | A#3 minus 6 cents |
| C4 | 245.31 | 245.18 | 245.95 | 245.38 | 245.455 | 0.34 | B3 minus 10 cents |
| C#4 / Db4 | 260.92 | 265.15 | 262.49 | 266.29 | 263.7125 | 2.45 | C4 plus 14 cents |
| D4 | 290.29 | 286.69 | 286.44 | 283.28 | 286.675 | 2.87 | D4 minus 42 cents |
| D#4 / Eb4 | 304.31 | 303.35 | 305 | 306.17 | 304.7075 | 1.19 | D#4 minus 36 cents |
| E4 | 329.13 | 325.08 | 330.37 | 330.6 | 328.795 | 2.56 | E4 minus 4 cents |
| F4 | 357.24 | 358.42 | 359.61 | 355.49 | 357.69 | 1.76 | F4 plus 41 cents |
| F#4 / Gb4 | 367.82 | 365.16 | 365.64 | 365.16 | 365.945 | 1.27 | F#4 minus 19 cents |
| G4 | 429.99 | 426.94 | 427.03 | 413.22 | 424.295 | 7.52 | G#4 plus 37 cents |
| G#4 / Ab4 | 436.77 | 435.07 | 433.21 | 431.08 | 434.0325 | 2.45 | A4 minus 24 cents |
| A4 | 460.19 | 465.29 | 459.16 | 458.4 | 460.76 | 3.11 | A#4 minus 20 cents |
| A#4 / Bb4 | 487.13 | 500.96 | 514.48 | 484.13 | 496.675 | 13.95 | B4 plus 10 cents |
| B4 | 545.71 | 537.08 | 536.76 | 550.4 | 542.4875 | 6.71 | C#5 minus 37 cents |
| C5 | 565.36 | 573.38 | 568.3 | 565.45 | 568.1225 | 3.76 | C#5 plus 42 cents |
| C#5 / Db5 | 651.54 | 639.7 | 636.25 | 655.93 | 645.855 | 9.38 | E5 minus 36 cents |
| D5 (with palm keys) | 663.95 | 663.73 | 662.78 | 663.55 | 663.5025 | 0.51 | E5 plus 11 cents |
| D#5 / Eb5 (with palm keys) | 677.83 | 674.51 | 678.24 | 687.5 | 679.52 | 5.58 | F5 minus 48 cents |
| E5 (with palm keys) | 727.61 | 715.72 | 716.16 | 727.29 | 721.695 | 6.65 | F#5 plus 43 cents |
| F5 (with palm keys) | 788.25 | 784.01 | 785.25 | 777.4 | 783.7275 | 4.58 | G5 minus 1 cent |
| F#5 / Gb5 (with palm keys) | 803.56 | X | 809.44 | 801.56 | 804.8533333 | 4.10 | G5 plus 45 cents |
| G5 (with palm keys) | 844.67 | 848.4 | 857.41 | X | 850.16 | 6.55 | G#5 plus 40 cents |

| Alto Saxophone | | | | | | | |
|-----------------------------------|-----------|-------------|-------------|-------------|--------------|-------------|--------------------|
| | Fingering | Test 1 (Hz) | Test 2 (Hz) | Test 3 (Hz) | Average (Hz) | St Dev (Hz) | Musical Notation |
| A#3 / Bb3 | | 146.79 | 144.44 | 146.24 | 145.23 | 145.675 | 1.05 |
| B3 | | 154.74 | 154.87 | 154.3 | 154.65 | 154.64 | D3 minus 14 cents |
| C4 | | 163.83 | 163.89 | 163.19 | 163.15 | 163.515 | D#3 minus 10 cents |
| C#4 / Db4 | | 175.57 | 175.4 | 175.07 | 174.92 | 175.24 | E3 minus 14 cents |
| D4 | | 187.78 | 186.45 | 186.24 | 185.16 | 186.4075 | F#3 plus 6 cents |
| D#4 / Eb4 | | 192.38 | 193.27 | 193.78 | 193.63 | 193.265 | G3 minus 24 cents |
| E4 | | 204.6 | 204.36 | 204.17 | 205.05 | 204.545 | G#3 minus 26 cents |
| F4 | | 226.98 | 223.33 | 223.83 | 224.54 | 224.67 | A3 plus 36 cents |
| F#4 / Gb4 | | 243.65 | 242.5 | 242.38 | 242.78 | 242.8275 | B3 minus 29 cents |
| G4 | | 251.31 | 251.67 | 250.61 | 250.23 | 250.955 | B3 plus 28 cents |
| G#4 / Ab4 | | 273.35 | 269.18 | 272.72 | 273.2 | 272.1125 | C#4 minus 32 cents |
| A4 | | 297.96 | 297.51 | 297.98 | 296.22 | 297.4175 | D4 plus 22 cents |
| A#4 / Bb4 | | 316.57 | 313.47 | 312.24 | 312.78 | 313.765 | D#4 plus 15 cents |
| B4 | | 347 | 340.72 | 339.23 | 337.61 | 341.14 | F4 minus 41 cents |
| C5 | | 368.52 | 365.73 | 363.48 | 364.7 | 365.6075 | F#4 minus 21 cents |
| C#5 / Db5 | | 397.84 | 394.17 | 394.23 | 393.88 | 395.03 | G4 plus 13 cents |
| D5 (with palm keys) | | 425.34 | 410.53 | 422.02 | 413.35 | 417.81 | G#4 plus 10 cents |
| D#5 / Eb5 (with palm keys) | | 434.19 | 439.3 | 430.54 | 430.6 | 433.6575 | A4 minus 25 cents |
| E5 (with palm keys) | | 462.16 | 464.7 | 465.84 | 461.6 | 463.575 | A#4 minus 10 cents |
| F5 (with palm keys) | | 494.9 | 495.02 | 492.9 | 494.14 | 494.24 | B4 plus 1 cent |
| F#5 / Gb5 (with palm keys) | | 521.48 | 521.88 | 523.57 | 520.49 | 521.855 | C5 minus 5 cents |

| Tenor Saxophone | | | | | | | |
|-----------------------------------|-----------|-------------|-------------|-------------|--------------|-------------|--------------------|
| | Fingering | Test 1 (Hz) | Test 2 (Hz) | Test 3 (Hz) | Average (Hz) | St Dev (Hz) | Musical Notation |
| A#3 / Bb3 | 110.4 | 110.55 | 110.49 | 110.56 | 110.5 | 0.07 | A2 plus 8 cents |
| B3 | 117.38 | 117.84 | 117.88 | 117.81 | 117.7275 | 0.23 | A#2 plus 18 cents |
| C4 | 124.57 | 125.86 | 124.21 | 124.94 | 124.895 | 0.71 | B2 plus 20 cents |
| C#4 / Db4 | 129.41 | 130.84 | 129.77 | 133 | 130.755 | 1.62 | C3 minus 1 cent |
| D4 | 140.59 | 139.32 | 140.24 | 139.16 | 139.8275 | 0.70 | C#3 plus 15 cents |
| D#4 / Eb4 | 144.24 | 148.64 | 144.7 | 145.19 | 145.6925 | 2.00 | D3 minus 13 cents |
| E4 | 155.91 | 155.37 | 155.9 | 155.77 | 155.7375 | 0.25 | D#3 plus 2 cents |
| F4 | 165.75 | 165.33 | 165.91 | 165.43 | 165.605 | 0.27 | E3 plus 8 cents |
| F#4 / Gb4 | 174.58 | 176.21 | 175.11 | 175.03 | 175.2325 | 0.69 | F3 plus 6 cents |
| G4 | 186.89 | 186.85 | 186.3 | 186.58 | 186.655 | 0.27 | F#3 plus 15 cents |
| G#4 / Ab4 | 198.93 | 198.66 | 198.91 | 198.29 | 198.6975 | 0.30 | G3 plus 24 cents |
| A4 | 220.47 | 221.24 | 221.19 | 222.46 | 221.34 | 0.83 | A3 plus 11 cents |
| A#4 / Bb4 | 232.88 | 231.08 | 233.12 | 232.1 | 232.295 | 0.92 | A#3 minus 6 cents |
| B4 | 246.57 | 246.2 | 246.86 | 246.21 | 246.46 | 0.32 | B3 minus 3 cents |
| C5 | 269.89 | 269.11 | 267.53 | 267.15 | 268.42 | 1.30 | C4 plus 44 cents |
| C#5 / Db5 | 289.92 | 288.48 | 288.56 | 287.82 | 288.695 | 0.88 | D4 minus 30 cents |
| D5 (with palm keys) | 307.66 | 307.2 | 305.3 | 305.58 | 306.435 | 1.17 | D#4 minus 26 cents |
| D#5 / Eb5 (with palm keys) | 333.5 | 328.99 | 328.44 | 326.5 | 329.3575 | 2.96 | E4 minus 1 cent |
| E5 (with palm keys) | 363.49 | 364.5 | 362.8 | 361.62 | 363.1025 | 1.21 | F#4 minus 33 cents |
| F5 (with palm keys) | 379.03 | 379.77 | 382.4 | 379.4 | 380.15 | 1.53 | F#4 plus 47 cents |
| F#5 / Gb5 (with palm keys) | 403.17 | 405.98 | 401.41 | 403.17 | 403.4325 | 1.89 | G4 plus 50 cents |

| Baritone Saxophone | | | | | | | | |
|-----------------------------------|-----------|-------------|-------------|-------------|-------------|-----------------|-------------|--------------------|
| | Fingering | Test 1 (Hz) | Test 2 (Hz) | Test 3 (Hz) | Test 4 (Hz) | Average (Hz) | St Dev (Hz) | Musical Notation |
| A3 | | 68.77 | 68.42 | 68.3 | 68.51 | 68.5 | 0.20 | C#2 minus 20 cents |
| A#3 / Bb3 | | 73.57 | 73.77 | 73.7 | 73.4 | 73.61 | 0.16 | D2 plus 5 cents |
| B3 | | 76.36 | 77.32 | 76.54 | 76.86 | 76.77 | 0.42 | D#2 minus 23 cents |
| C4 | | 84.04 | 84.15 | 84.49 | 84.32 | 84.25 | 0.20 | E2 plus 38 cents |
| C#4 / Db4 | | 88.87 | 87.17 | 87.44 | 88.41 | 87.9725 | 0.80 | F2 plus 13 cents |
| D4 | | 92.63 | 92.66 | 92.65 | 92.55 | 92.6225 | 0.05 | F#2 plus 2 cents |
| D#4 / Eb4 | | 100.06 | 98.68 | 100.58 | 99.31 | 99.6575 | 0.83 | G2 plus 29 cents |
| E4 | | 106.18 | 106.39 | 106.3 | 106.57 | 106.36 | 0.16 | G#2 plus 42 cents |
| F4 | | 114.54 | 114.45 | 113.12 | 113.98 | 114.0225 | 0.65 | A#2 minus 38 cents |
| F#4 / Gb4 | | 116.62 | 115.42 | 116 | 115.57 | 115.9025 | 0.54 | A#2 minus 10 cents |
| G4 | | 129.07 | 128.31 | 126.6 | 127.92 | 127.975 | 1.03 | C3 minus 38 cents |
| G#4 / Ab4 | | 136.34 | 135.33 | 135.08 | 135.26 | 135.5025 | 0.57 | C#3 minus 39 cents |
| A4 | | 146.73 | 145.75 | 144.55 | 144.67 | 145.425 | 1.02 | D3 minus 17 cents |
| A#4 / Bb4 | | 150.74 | 151.14 | 150.94 | 150.01 | 150.7075 | 0.49 | D3 plus 45 cents |
| B4 | | 162.69 | 162.9 | 163.12 | 162.56 | 162.8175 | 0.25 | E3 minus 21 cents |
| C5 | | 176.21 | 175.31 | 176.6 | 176.13 | 176.0625 | 0.54 | F3 plus 14 cents |
| C#5 / Db5 | | 188.52 | 186.45 | 185.23 | 185.85 | 186.5125 | 1.43 | F#3 plus 14 cents |
| D5 (with palm keys) | | 197.21 | 198.71 | 199.54 | 196.14 | 197.9 | 1.52 | G3 plus 17 cents |
| D#5 / Eb5 (with palm keys) | | 206.3 | 206.75 | 205.81 | 206.21 | 206.2675 | 0.39 | G#3 minus 12 cents |
| E5 (with palm keys) | | 221.68 | 220.3 | 221.22 | 221.54 | 221.185 | 0.62 | A3 plus 9 cents |
| F5 (with palm keys) | | 233.84 | 233.44 | 233.85 | 233.02 | 233.5375 | 0.39 | A#3 plus 3 cents |
| F#5 / Gb5 (with palm keys) | | 248.08 | 248.07 | 247.45 | 247.02 | 247.655 | 0.52 | B3 plus 5 cents |

Pitch Manual for Trumpet Sounds:

| Soprano Saxophone | | | | | | | |
|-------------------|-------------|-------------|-------------|-------------|-----------------|-------------|--------------------|
| Fingering | Test 1 (Hz) | Test 2 (Hz) | Test 3 (Hz) | Test 4 (Hz) | Average (Hz) | St Dev (Hz) | Musical Notation |
| A#3 / Bb3 | 209.63 | 210.7 | 211.15 | 215.03 | 211.6275 | 2.36 | G#3 plus 33 cents |
| B3 | 220.65 | 224.63 | 226.65 | 227.06 | 224.7475 | 2.93 | A3 plus 37 cents |
| C4 | 240.08 | 241.63 | 242.34 | 244.92 | 242.2425 | 2.02 | B3 minus 33 cents |
| C#4 / Db4 | 259.14 | 259.37 | 259.26 | 259.68 | 259.3625 | 0.23 | C4 minus 15 cents |
| D4 | 272.31 | 273.13 | 275.99 | 273.88 | 273.8275 | 1.58 | C#4 minus 21 cents |
| D#4 / Eb4 | 293.68 | 291.58 | 292.52 | 289.72 | 291.875 | 1.67 | D4 minus 11 cents |
| E4 | 310.4 | 313.92 | 313.76 | 313.78 | 312.965 | 1.71 | D#4 plus 10 cents |
| F4 | 328.69 | 331.35 | 330.21 | 329.45 | 329.925 | 1.13 | E4 plus 2 cents |
| F#4 / Gb4 | 347.43 | 355.52 | 354.67 | 354.26 | 352.97 | 3.73 | F4 plus 18 cents |
| G4 | 369.88 | 368.01 | 371.34 | 371.64 | 370.2175 | 1.66 | F#4 plus 1 cent |
| G#4 / Ab4 | 400.82 | 393.59 | 396.77 | 399.67 | 397.7125 | 3.23 | G4 plus 25 cents |
| A4 | 427.23 | 432.16 | 434.5 | 432.47 | 431.59 | 3.09 | A4 minus 33 cents |
| A#4 / Bb4 | 456.24 | 462.08 | 463.66 | 466.05 | 462.0075 | 4.18 | A#4 minus 16 cents |
| B4 | 502.54 | 504.6 | 500.22 | 501.23 | 502.1475 | 1.89 | B4 plus 29 cents |
| C5 | 519.34 | 530.96 | 524.49 | 523.56 | 524.5875 | 4.80 | C5 plus 4 cents |
| C#5 / Db5 | 564.11 | 569.28 | 560.66 | 565.02 | 564.7675 | 3.55 | C#5 plus 32 cents |
| D5 | 576 | 577.77 | 579.76 | 576.99 | 577.63 | 1.59 | D5 minus 29 cents |
| D#5 / Eb5 | 599.86 | 606.22 | 606.52 | 608.23 | 605.2075 | 3.67 | D#5 minus 48 cents |
| E5 | 658.69 | 659.9 | 651.89 | 657.87 | 657.0875 | 3.56 | E5 minus 6 cents |
| F5 | 694.21 | 698.1 | 700.28 | 703.63 | 699.055 | 3.95 | F5 plus 1 cent |
| F#5 / Gb5 | 753.18 | 754.69 | 754.65 | 753.16 | 753.92 | 0.87 | F#5 plus 32 cents |
| G5 | 824.28 | 826.58 | 810.24 | 807.19 | 817.0725 | 9.78 | G#5 minus 28 cents |

| Alto Saxophone | | | | | | | |
|----------------|-----------|-------------|-------------|-------------|--------------|-------------|--------------------|
| | Fingering | Test 1 (Hz) | Test 2 (Hz) | Test 3 (Hz) | Average (Hz) | St Dev (Hz) | Musical Notation |
| A#3 / Bb3 | | 143.19 | 145.08 | 144.93 | 144.33 | 144.3825 | 0.86 |
| B3 | | 154.08 | 154.06 | 154.52 | 154.04 | 154.175 | D3 minus 29 cents |
| C4 | | 161.42 | 161.56 | 162.19 | 161.08 | 161.5625 | E3 minus 34 cents |
| C#4 / Db4 | | 169.43 | 170.9 | 170.75 | 169.72 | 170.2 | F3 minus 44 cents |
| D4 | | 178.65 | 179.38 | 179.26 | 181.45 | 179.685 | F3 plus 50 cents |
| D#4 / Eb4 | | 186.9 | 188.9 | 190.25 | 190.42 | 189.1175 | F#3 plus 38 cents |
| E4 | | 198.57 | 200.41 | 200.36 | 200.56 | 199.975 | G3 plus 35 cents |
| F4 | | 210.39 | 209.36 | 211.68 | 212.52 | 210.9875 | G#3 plus 28 cents |
| F#4 / Gb4 | | 223.71 | 224.38 | 225 | 225.82 | 224.7275 | A3 plus 37 cents |
| G4 | | 239.22 | 240.84 | 241.5 | 243.76 | 241.33 | B3 minus 40 cents |
| G#4 / Ab4 | | 257.89 | 252.47 | 254.96 | 257.86 | 255.795 | C4 minus 39 cents |
| A4 | | 275.29 | 273.37 | 275.95 | 277.74 | 275.5875 | C#4 minus 10 cents |
| A#4 / Bb4 | | 292.63 | 291.18 | 291.73 | 294.15 | 292.4225 | D4 minus 7 cents |
| B4 | | 313.26 | 314.9 | 316.75 | 313.83 | 314.685 | D#4 plus 20 cents |
| C5 | | 326.61 | 324.04 | 335.96 | 336.72 | 330.8325 | E4 plus 6 cents |
| C#5 / Db5 | | 353.06 | 348.5 | 350.41 | 347.84 | 349.9525 | F4 plus 4 cents |
| D5 | | 370.32 | 371.71 | 371.98 | 372.56 | 371.6425 | F#4 plus 8 cents |
| D#5 / Eb5 | | 393.2 | 394.13 | 395.34 | 391.74 | 393.6025 | G4 plus 7 cents |
| E5 | | 415.55 | 420.18 | 422.24 | 422.24 | 420.0525 | G#4 plus 20 cents |
| F5 | | 442.02 | 455.05 | 459.12 | 459.28 | 453.8675 | A#4 minus 46 cents |
| F#5 / Gb5 | | 487.75 | 487.22 | 489.48 | 490.82 | 488.8175 | B4 minus 18 cents |
| G5 | | 522.07 | 526.75 | 525.91 | 527.71 | 525.61 | C5 plus 8 cents |
| G#5 / Ab5 | | 571.86 | 566.98 | 567.47 | 567.78 | 568.5225 | C#5 plus 44 cents |
| A5 | | 606.01 | 612.96 | 608.07 | 612.23 | 609.8175 | D#5 minus 35 cents |
| A#5 / Bb5 | | 644.57 | 644.55 | 640.9 | 648.21 | 644.5575 | E5 minus 39 cents |

| Tenor Saxophone | | | | | | | |
|-----------------|-----------|-------------|-------------|-------------|--------------|-------------|--------------------|
| | Fingering | Test 1 (Hz) | Test 2 (Hz) | Test 3 (Hz) | Average (Hz) | St Dev (Hz) | Musical Notation |
| A#3 / Bb3 | | 107.73 | 107.45 | 108.72 | 108.8 | 0.69 | A2 minus 29 cents |
| B3 | | 115.19 | 114.37 | 117.88 | 114.71 | 1.60 | A#2 minus 15 cents |
| C4 | | 122.18 | 122.48 | 122.94 | 122.17 | 0.36 | B2 minus 14 cents |
| C#4 / Db4 | | 130.01 | 129.45 | 129.13 | 128.4 | 0.67 | C3 minus 21 cents |
| D4 | | 137.93 | 137.89 | 136.59 | 138.12 | 0.70 | C#3 minus 12 cents |
| D#4 / Eb4 | | 147.28 | 143.76 | 145.79 | 145.33 | 1.45 | D3 minus 15 cents |
| E4 | | 156.43 | 158.72 | 158.36 | 158.74 | 1.10 | D#3 plus 28 cents |
| F4 | | 164.62 | 163.6 | 165.76 | 166.87 | 1.41 | E3 plus 4 cents |
| F#4 / Gb4 | | 174.07 | 176.12 | 176.7 | 178.35 | 1.77 | F3 plus 17 cents |
| G4 | | 185.41 | 187.66 | 185.83 | 185.78 | 1.01 | F#3 plus 11 cents |
| G#4 / Ab4 | | 195.72 | 198.19 | 199.56 | 200.29 | 2.01 | G3 plus 21 cents |
| A4 | | 212.37 | 213.13 | 210.79 | 213.08 | 2.09 | G#3 plus 39 cents |
| A#4 / Bb4 | | 224.2 | 223.91 | 225.91 | 226.02 | 1.11 | A3 plus 39 cents |
| B4 | | 237.44 | 237.94 | 236.52 | 238.89 | 0.99 | A#3 plus 34 cents |
| C5 | | 254.16 | 255.08 | 255.13 | 258.68 | 2.00 | C4 minus 39 cents |
| C#5 / Db5 | | 272.43 | 272.43 | 272.33 | 273.49 | 0.55 | C#4 minus 28 cents |
| D5 | | 282.66 | 283.67 | 284.78 | 284.36 | 0.93 | C#4 plus 41 cents |
| D#5 / Eb5 | | 298.81 | 300 | 300.25 | 300.48 | 0.74 | D4 plus 36 cents |
| E5 | | 321.74 | 322.4 | 319.14 | 322.12 | 1.50 | E4 minus 44 cents |
| F5 | | 341.16 | 341.63 | 340.37 | 342.61 | 0.94 | F4 minus 39 cents |
| F#5 / Gb5 | | 370.78 | 369.77 | 366.95 | 366.55 | 2.08 | F#4 minus 7 cents |
| G5 | | 396.3 | 398.31 | 400.36 | 397.34 | 1.73 | G4 plus 27 cents |
| G#5 / Ab5 | | 424.43 | 422.36 | 424 | 423.32 | 0.90 | G#4 plus 34 cents |
| A5 | | 457.18 | 454.68 | 453.71 | 455.56 | 1.47 | A#4 minus 41 cents |

| | | | | | | | |
|-----------|--------|--------|--------|--------|----------|-------|-------------------|
| A#5 / Bb5 | 483.4 | 494.09 | 494.53 | 495.37 | 491.8475 | 5.66 | B4 minus 7 cents |
| B5 | 532.17 | 530.43 | 528.48 | 554.35 | 536.3575 | 12.09 | C5 plus 43 cents |
| C6 | 583.5 | 581.8 | 581.98 | 580.68 | 581.99 | 1.16 | D5 minus 16 cents |

Baritone Saxophone

| Fingering | Test 1 (Hz) | Test 2 (Hz) | Test 3 (Hz) | Test 4 (Hz) | Average (Hz) | St Dev (Hz) | Musical Notation |
|----------------|-------------|-------------|-------------|-------------|--------------|-------------|--------------------|
| A3 - 1° | 133.45 | 132.7 | 135.2 | 136.47 | 134.455 | 1.70 | C3 plus 48 cents |
| A#3 / Bb3 - 1° | 147.75 | 147.13 | 146.79 | 142.48 | 146.0375 | 2.40 | D3 minus 9 cents |
| B3 - 1° | 153.06 | 153.51 | 151.98 | 155.88 | 153.6075 | 1.65 | D#3 minus 22 cents |
| C4 - 1° | 162.01 | 162.67 | 162.4 | 162.66 | 162.435 | 0.31 | E3 minus 25 cents |
| C#4 / Db4 - 1° | 174.78 | 173.31 | 174.52 | 174.97 | 174.395 | 0.75 | F3 minus 2 cents |
| D4 - 1° | 183.41 | 185.08 | 185.15 | 185.82 | 184.865 | 1.03 | F#3 minus 1 cent |
| D#4 / Eb4 - 1° | 194.83 | 194.84 | 196.26 | 194.84 | 195.1925 | 0.71 | G3 minus 7 cents |
| E4 - 1° | 205.35 | 203.27 | 209.34 | 209.05 | 206.7525 | 2.95 | G#3 minus 8 cents |
| F4 - 1° | 218.31 | 221.67 | 222.25 | 223.17 | 221.35 | 2.12 | A3 plus 11 cents |
| F#4 / Gb4 - 1° | 236.35 | 238.69 | 238.18 | 240.15 | 238.3425 | 1.57 | A#3 plus 39 cents |
| G4 - 1° | 251.44 | 252.89 | 253.6 | 252.22 | 252.5375 | 0.92 | B3 plus 39 cents |
| G#4 / Ab4 - 1° | 268 | 270.46 | 270.79 | 271.96 | 270.3025 | 1.66 | C#4 minus 44 cents |
| A4 - 1° | 288.37 | 287.92 | 290.03 | 292.59 | 289.8525 | 2.02 | D4 minus 23 cents |
| A#4 / Bb4 - 1° | 306.97 | 309.44 | 309.62 | 312.33 | 309.59 | 2.19 | D#4 minus 9 cents |
| B4 - 1° | 336.54 | 335.76 | 336.7 | 335.04 | 336.01 | 0.77 | E4 plus 33 cents |
| C5 - 1° | 355.31 | 357.36 | 358.31 | 361.71 | 358.1725 | 2.67 | F4 plus 44 cents |
| C#5 / Db5 - 1° | 390.35 | 390.27 | 393.6 | 393.98 | 392.05 | 2.02 | G4 plus 0 cents |
| D5 - 1° | 416.46 | 414.05 | 413.81 | 415.43 | 414.9375 | 1.24 | G#4 minus 2 cents |
| D#5 / Eb5 - 1° | 418.04 | 418.66 | 421.94 | 421.69 | 420.0825 | 2.02 | G#4 plus 20 cents |
| E5 - 1° | 441.15 | 442.53 | 437.79 | 442.35 | 440.955 | 2.20 | A4 plus 4 cents |
| F5 - 1° | 477.46 | 477.43 | 477.07 | 478.17 | 477.5325 | 0.46 | A#4 plus 42 cents |

| | | | | | | | |
|-----------------------|--------|--------|--------|--------|-----------------|------|---------------------------|
| F#5 / Gb5 - 1° | 495.52 | 497.72 | 496.86 | 494.92 | 496.255 | 1.27 | B4 plus 8 cents |
| G5 - 1° | 537.64 | 537.84 | 538.91 | 540.67 | 538.765 | 1.39 | C#5 minus 49 cents |
| G#5 / Ab5 - 1° | 586.37 | 586.65 | 589.99 | 583.65 | 587.915 | 1.72 | D5 plus 2 cents |
| A5 - 1° | 597.98 | 590.98 | 598.06 | 598.36 | 596.345 | 3.58 | D5 plus 26 cents |
| D5 - 2° | 278.57 | 279.92 | 281 | 281.21 | 280.175 | 1.21 | C#4 plus 19 cents |
| D#5 / Eb5 - 2° | 292.22 | 298.25 | 298.78 | 298.82 | 297.0175 | 3.21 | D4 plus 20 cents |
| E5 - 2° | 317.48 | 319.31 | 319.54 | 320.85 | 319.295 | 1.39 | D#4 plus 45 cents |
| F5 - 2° | 337.88 | 341.62 | 342.25 | 343.54 | 341.3225 | 2.43 | F4 minus 40 cents |
| F#5 / Gb5 - 2° | 367.36 | 366.7 | 368.75 | 371.8 | 368.6525 | 2.27 | F#4 minus 6 cents |
| G5 - 2° | 393.76 | 397.65 | 398.16 | 398.54 | 397.0275 | 2.21 | G4 plus 22 cents |
| G#5 / Ab5 - 2° | 428.87 | 429.08 | 429.55 | 429.18 | 429.17 | 0.28 | A4 minus 43 cents |
| A5 - 2° | 459.76 | 456.67 | 457.03 | 456.85 | 457.5775 | 1.46 | A#4 minus 32 cents |
| A#/Bb 5 - 2° | 501.15 | 501.2 | 493.18 | 497.25 | 498.195 | 3.82 | B4 plus 15 cents |

Pitch Manual for Saxo-Flute Hybridity:

| Soprano Saxophone | | | | | | | |
|----------------------------|-------------|-------------|-------------|-------------|--------------------|-------------|---------------------------|
| Fingering | Test 1 (Hz) | Test 2 (Hz) | Test 3 (Hz) | Test 4 (Hz) | Average (Hz) | St Dev (Hz) | Musical Notation |
| F#4 / Gb4 | 436.11 | 437.19 | 436.24 | 438.39 | 436.9825 | 1.05 | A4 minus 12 cents |
| G4 | X | 482.69 | 496 | 485.63 | 488.1066667 | 6.99 | B4 minus 20 cents |
| G#4 / Ab4 | 510.14 | 512.96 | 508.33 | 513.97 | 511.35 | 2.58 | C5 minus 40 cents |
| A4 | 550.4 | 550.8 | 550.77 | 551.2 | 550.7925 | 0.33 | C#5 minus 11 cents |
| A#4 / Bb4 | 586.74 | 592.53 | 589.81 | 583.74 | 588.205 | 3.80 | D5 plus 3 cents |
| B4 | 654.23 | 655.3 | 653.02 | 654.33 | 654.22 | 0.93 | E5 minus 13 cents |
| C5 | 730.15 | 722.74 | 721.38 | 720.99 | 723.815 | 4.29 | F#5 minus 38 cents |
| C#5 / Db5 | 780.34 | 781.32 | 780.49 | 780.46 | 780.6525 | 0.45 | G5 minus 7 cents |
| D5 (with palm keys) | 811.94 | 827.51 | 826.87 | 828.38 | 823.675 | 7.85 | G#5 minus 15 cents |

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|-----------------------------------|---------|---------|---------|---------|----------|------|--------------------|
| D#5 / Eb5 (with palm keys) | 873.01 | 869.77 | 870.96 | 879.56 | 873.325 | 4.37 | A5 minus 13 cents |
| E5 (with palm keys) | 926.99 | 937.65 | 929.43 | 926.18 | 930.0625 | 5.24 | A#5 minus 4 cents |
| F5 (with palm keys) | 985.14 | 985.4 | 987.43 | 994.01 | 987.995 | 4.14 | B5 plus 0 cents |
| F#5 / Gb5 (with palm keys) | 1035.97 | 1043.18 | 1040.27 | 1049.26 | 1042.17 | 5.58 | C6 minus 7 cents |
| G5 (with palm keys) | 1093.91 | 1108.74 | 1096.14 | 1109.11 | 1101.975 | 8.08 | C#6 minus 11 cents |

| Alto Saxophone | | | | | | | |
|--|-------------|-------------|-------------|-------------|--------------|-------------|--------------------|
| Fingering | Test 1 (Hz) | Test 2 (Hz) | Test 3 (Hz) | Test 4 (Hz) | Average (Hz) | St Dev (Hz) | Musical Notation |
| A#4 / Bb4 - Low Octave | 402.44 | 401.79 | 401.06 | 398.47 | 400.94 | 1.74 | G4 plus 39 cents |
| B4 - Low Octave | 438.62 | 435.99 | 435.54 | 437.99 | 437.035 | 1.50 | A4 minus 12 cents |
| C5 - Low Octave | 476.25 | 476.27 | 473.9 | 475.88 | 475.575 | 1.13 | A#4 plus 35 cents |
| C#5 / Db5 - Low Octave | 519.66 | 519.03 | 514.73 | 520.65 | 518.5175 | 2.61 | C5 minus 16 cents |
| D5 (with palm keys) - Low Octave | 547.13 | 545.22 | 547.64 | 548.09 | 547.02 | 1.26 | C#5 minus 23 cents |
| D#5 / Eb5 (with palm keys) - Low Octave | 587.95 | 588.63 | 589.66 | 589.05 | 588.8225 | 0.72 | D5 plus 4 cents |
| E5 (with palm keys) - Low Octave | 621.06 | 622.94 | 627.5 | 632.18 | 625.92 | 4.97 | D#5 plus 10 cents |
| F5 (with palm keys) - Low Octave | 667.21 | 664.22 | 665.21 | 664.45 | 665.2725 | 1.36 | E5 plus 16 cents |
| F#5 / Gb5 (with palm keys) - Low Octave | 700.15 | 710.73 | 704.31 | 710.24 | 706.3575 | 5.06 | F5 plus 19 cents |
| D#4 / Eb4 - Mid Octave | 466.59 | 466.65 | 464.69 | 463.01 | 465.235 | 1.74 | A#4 minus 3 cents |
| E4 - Mid Octave | 493.77 | 487.97 | 492.06 | 488.99 | 490.6975 | 2.69 | B4 minus 11 cents |
| F4 - Mid Octave | 528.14 | 525.99 | 529.7 | 528.12 | 527.9875 | 1.52 | C5 plus 16 cents |
| F#4 / Gb4 - Mid Octave | 560.85 | 561.29 | 556.86 | 556.52 | 558.88 | 2.54 | C#5 plus 14 cents |
| G4 - Mid Octave | 632.77 | 632.94 | 632.98 | 633.86 | 633.1375 | 0.49 | D#5 plus 30 cents |
| G#4 / Ab4 - Mid Octave | 675.13 | 681.5 | 683.01 | 675.24 | 678.72 | 4.13 | E5 plus 50 cents |
| A4 - Mid Octave | 730.25 | 732.26 | 724.36 | 729.32 | 729.0475 | 3.36 | F#5 minus 26 cents |
| A#4 / Bb4 - Mid Octave | 767.29 | 780.93 | 778.35 | 779.75 | 776.58 | 6.28 | G5 minus 16 cents |
| B4 - Mid Octave | 829.54 | 827.76 | 829.27 | 830.66 | 829.3075 | 1.19 | G#5 minus 3 cents |

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|--|---------|---------|---------|---------|------------------|------|--------------------|
| C5 - Mid Octave | 871.73 | 871.49 | 876.13 | 862.15 | 870.375 | 5.88 | A5 minus 19 cents |
| C#5 / Db5 - Mid Octave | 952.58 | 951.62 | 950.44 | 942.51 | 949.2875 | 4.60 | A#5 plus 31 cents |
| D5 (with palm keys) - Mid Octave | 1017.1 | 1020.09 | 1015.66 | 1022.94 | 1018.9475 | 3.24 | C6 minus 46 cents |
| D#5 / Eb5 (with palm keys) - Mid Octave | 1078.89 | 1082.02 | 1089.15 | 1097.42 | 1086.87 | 8.24 | C#6 minus 34 cents |
| E5 (with palm keys) - Mid Octave | 1157.28 | 1165.98 | 1160.97 | 1167.53 | 1162.94 | 4.70 | D6 minus 17 cents |
| F5 (with palm keys) - Mid Octave | 1226.2 | 1223.29 | 1229.68 | 1232.34 | 1227.8775 | 3.96 | D#6 minus 23 cents |
| F#5 / Gb5 (with palm keys) - Mid Octave | 1310.78 | 1315.21 | 1309.93 | 1322.08 | 1314.5 | 5.56 | E6 minus 5 cents |
| G4 - High Octave | 448.03 | 458.27 | 453.55 | 451.21 | 452.765 | 4.31 | A4 plus 50 cents |

| Tenor Saxophone | | | | | | | |
|--|-------------|-------------|-------------|-------------|-----------------|-------------|--------------------|
| Fingering | Test 1 (Hz) | Test 2 (Hz) | Test 3 (Hz) | Test 4 (Hz) | Average (Hz) | St Dev (Hz) | Musical Notation |
| E4 - Mid Octave | 182.47 | 186.43 | 183.43 | 183.28 | 183.9025 | 1.74 | F#3 minus 10 cents |
| F4 - Mid Octave | 195.56 | 194.58 | 195 | 195.66 | 195.2 | 0.51 | G3 minus 7 cents |
| F#4 / Gb4 - Mid Octave | 212.56 | 209.39 | 210.57 | 210.39 | 210.7275 | 1.33 | G#3 plus 25 cents |
| G4 - Mid Octave | 229.54 | 226.46 | 227.47 | 226.61 | 227.52 | 1.42 | A#3 minus 42 cents |
| G#4 / Ab4 - Mid Octave | 241.13 | 241.81 | 242.37 | 242 | 241.8275 | 0.52 | B3 minus 36 cents |
| A4 - Mid Octave | 267.26 | 260.64 | 263.57 | 261.82 | 263.3225 | 2.89 | C4 plus 11 cents |
| A#4 / Bb4 - Mid Octave | 283.73 | 282.1 | 279.57 | 280.19 | 281.3975 | 1.89 | C#4 plus 26 cents |
| B4 - Mid Octave | 304.05 | 307.8 | 306.17 | 308.4 | 306.605 | 1.95 | D#4 minus 25 cents |
| C5 - Mid Octave | 331.93 | 333 | 330.91 | 334.02 | 332.465 | 1.34 | E4 plus 15 cents |
| C#5 / Db5 - Mid Octave | 360.29 | 358.68 | 360.46 | 357.18 | 359.1525 | 1.54 | F4 plus 49 cents |
| D5 (with palm keys) - Mid Octave | 387.56 | 389.09 | 386.75 | 383.47 | 386.7175 | 2.37 | G4 minus 23 cents |
| D#5 / Eb5 (with palm keys) - Mid Octave | 414.77 | 416.73 | 416.97 | 419.54 | 417.0025 | 1.96 | G#4 plus 7 cents |
| E5 (with palm keys) - Mid Octave | 447.27 | 448.04 | 449.02 | 448.01 | 448.085 | 0.72 | A4 plus 32 cents |
| F5 (with palm keys) - Mid Octave | 476.89 | 481.66 | 489.55 | 480.53 | 482.1575 | 5.33 | B4 minus 42 cents |
| F#5 / Gb5 (with palm keys) - Mid Octave | 509.68 | 510.12 | 515.03 | 512.55 | 511.845 | 2.47 | C5 minus 38 cents |
| G4 - High Octave | 448.03 | 458.27 | 453.55 | 451.21 | 452.765 | 4.31 | A4 plus 50 cents |

| | | | | | | | |
|---|---------|---------|---------|---------|---------------------|------|--------------------|
| G#4 / Ab4 - High Octave | 483.12 | 486.91 | 485.91 | 485.48 | 485.355 | 1.61 | B4 minus 30 cents |
| A4 - High Octave | 525.41 | 519.03 | 520.72 | 515.27 | 520.1075 | 4.21 | C5 minus 10 cents |
| A#4 / Bb4 - High Octave | 556.63 | 567.63 | 565.72 | 564.65 | 563.6575 | 4.84 | C#5 plus 29 cents |
| B4 - High Octave | 602.01 | 601.77 | 600.13 | 602.18 | 601.5225 | 0.94 | D5 plus 41 cents |
| C5 - High Octave | X | 633.8 | 631.65 | 630.41 | 631.95333333 | 1.72 | D#5 plus 27 cents |
| C#5 / Db5 - High Octave | 720.35 | 724.66 | 719.24 | 724.31 | 722.14 | 2.75 | F#5 minus 42 cents |
| D5 (with palm keys) - High Octave | 775.56 | 774.44 | 771.93 | 772.74 | 773.6675 | 1.64 | G5 minus 23 cents |
| D#5 / Eb5 (with palm keys) - High Octave | 824.44 | 825.33 | 826.2 | 829.73 | 826.425 | 2.32 | G#5 minus 9 cents |
| E5 (with palm keys) - High Octave | 890.88 | 897.76 | 898.29 | 902.43 | 897.34 | 4.79 | A5 plus 34 cents |
| F5 (with palm keys) - High Octave | 968.93 | 968.32 | 971.38 | 974.26 | 970.7225 | 2.70 | B5 minus 30 cents |
| F#5 / Gb5 (with palm keys) - High Octave | 1041.27 | 1042.13 | 1044.57 | 1041.83 | 1042.45 | 1.46 | C6 minus 7 cents |

Baritone Saxophone

| Fingering | Test 1 (Hz) | Test 2 (Hz) | Test 3 (Hz) | Test 4 (Hz) | Average (Hz) | St Dev (Hz) | Musical Notation |
|--|-------------|-------------|-------------|-------------|-----------------|-------------|--------------------|
| B4 - Low Octave | 208.76 | 206.18 | 205.67 | 205.92 | 206.6325 | 1.43 | G#3 minus 9 cents |
| C5 - Low Octave | 221.7 | 220.88 | 223.59 | 223.99 | 222.54 | 1.49 | A3 plus 20 cents |
| C#5 / Db5 - Low Octave | 237.22 | 236.8 | 238.79 | 236.31 | 237.28 | 1.07 | A#3 plus 31 cents |
| D5 (with palm keys) - Low Octave | 252.19 | 253.15 | 252.16 | 254.84 | 253.085 | 1.26 | B3 plus 43 cents |
| D#5 / Eb5 (with palm keys) - Low Octave | 272.18 | 273.72 | 272.1 | 273.92 | 272.98 | 0.97 | C#4 minus 26 cents |
| E5 (with palm keys) - Low Octave | 292.49 | 294.17 | 291.2 | 292.2 | 292.515 | 1.23 | D4 minus 7 cents |
| F5 (with palm keys) - Low Octave | 311.79 | 314.24 | 312.69 | 313.29 | 313.0025 | 1.03 | D#4 plus 10 cents |
| F#5 / Gb5 (with palm keys) - Low Octave | 337.45 | 338.19 | 339.39 | 338.18 | 338.3025 | 0.80 | E4 plus 45 cents |
| C5 - Mid Octave | 431.73 | 431.16 | 428.9 | 427.54 | 429.8325 | 1.96 | A4 minus 40 cents |
| C#5 / Db5 - Mid Octave | 469.31 | 472.51 | 469.84 | 466.06 | 469.43 | 2.65 | A#4 plus 12 cents |
| D5 (with palm keys) - Mid Octave | 501.92 | 499.23 | 500.25 | 501.16 | 500.64 | 1.16 | B4 plus 24 cents |

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|--|---------|---------|---------|---------|-----------------|------|--------------------|
| D#5 / Eb5 (with palm keys) - Mid Octave | 530.94 | 531.75 | 535.01 | 537.63 | 533.8325 | 3.08 | C5 plus 35 cents |
| E5 (with palm keys) - Mid Octave | 574.19 | 574.26 | 578.79 | 579.24 | 576.62 | 2.77 | D5 minus 32 cents |
| F5 (with palm keys) - Mid Octave | 608.65 | 611.5 | 613.1 | 611.17 | 611.105 | 1.84 | D#5 minus 31 cents |
| F#5 / Gb5 (with palm keys) - Mid Octave | 661.23 | 671.01 | 672.91 | 671.04 | 669.0475 | 5.29 | E5 plus 26 cents |
| C5 - High Octave | 635.43 | 631.9 | 629.46 | 631.98 | 632.1925 | 2.45 | D#5 plus 27 cents |
| C#5 / Db5 - High Octave | 688.4 | 693.95 | 694.96 | 692.48 | 692.4475 | 2.88 | F5 minus 15 cents |
| D5 (with palm keys) - High Octave | 743.2 | 738.14 | 739.37 | 745.88 | 741.6475 | 3.55 | F#5 plus 4 cents |
| D#5 / Eb5 (with palm keys) - High Octave | 790.86 | 783.07 | 792.1 | 796.26 | 790.5725 | 5.51 | G5 plus 14 cents |
| E5 (with palm keys) - High Octave | 840.19 | 840.58 | 838.92 | 838.92 | 839.6525 | 0.86 | G#5 plus 19 cents |
| F5 (with palm keys) - High Octave | 895.75 | 892.29 | 895.24 | 892.2 | 893.87 | 1.89 | A5 plus 27 cents |
| F#5 / Gb5 (with palm keys) - High Octave | 947.57 | 959.62 | 953.25 | 961.43 | 955.4675 | 6.33 | A#5 plus 42 cents |
| D5 (with palm keys) - Altissimo | 1008.32 | 1005.38 | 1007.49 | 1010.15 | 1007.96 | 1.78 | B5 plus 35 cents |
| D#5 / Eb5 (with palm keys) - Altissimo Octave | 1059.27 | 1063.31 | 1068.6 | 1059.56 | 1062.685 | 4.35 | C6 plus 27 cents |

Repertoire

The following repertoire list includes pieces that use SWMP in any form. It includes the name of the composition, typical composer information, the year(s) of composition, instrumentation, publisher (if relevant), and for whom the work was written (if known). Additionally, on the website, further information concerning which SWMP techniques are featured in the work, a link to purchase or download the work (if available), and a link to the composers' website are included. Where applicable, I have included a link to a video or audio performance of the work, either by me or by other artists.

The repertoire list below has been updated as of October 2024. For a complete version of this list, please refer to the following webpage:
<https://www.saxowithoutmouthpiece.com/repertoire/>

| Repertoire for Saxophone Without Mouthpiece (updated October 2024) | | | | | | |
|--|------------|---|------|---|--|---------------------------|
| Last Name | First Name | Title of Composition | Year | Instrumentation | Publisher | Written For? |
| Alonso | Germanán | <i>el gran cabrón</i> | 2012 | Baritone Sax + Electronics | BabelScores | Patrick Stadler |
| Alonso | Germanán | <i>In Heaven Everything is Fine</i> | 2011 | Sax Quartet | BabelScores | |
| Aperghis | Georges | <i>Crosswind</i> | 1997 | Sax Quartet + Viola | Durand | XASAX |
| Aperghis | Georges | <i>Trio Funambule</i> | 2014 | Alto Sax + Piano + Percussion | Composer | |
| Arias | Helga | <i>Milk spilled on a stone</i> | 2017 | Sax Quartet | BabelScores | Sigma Project |
| Arroyo | Juan | <i>SAMA</i> | 2013 | Sax + Flute + Percussion + Piano + Electronics | Temperaments | Proxima Centauri |
| Arroyo | Juan | <i>Séliox</i> | 2018 | Baritone Saxophone + Cello | Temperaments | Carl-Emmanuel Fisbach |
| Arroyo | Juan | <i>Sikuri I</i> | 2012 | Tenor Sax + Electronics | Temperaments | Hiroe Yasui |
| Arroyo | Juan | <i>Sikuri II</i> | 2023 | Sax + Percussion + Electronics | Temperaments | Marie-Bernadette Charrier |
| Arroyo | Juan | <i>Sikuri IV</i> | 2013 | Sax Quartet + Electronics | Temperaments | |
| Arroyo | Juan | <i>Sikuri X</i> | 2015 | Sax Ensemble (10) | Temperaments | |
| Arroyo | Juan | <i>Sismo</i> | 2014 | Baritone Sax + Accordion + Piano + Violin + Cello + Electronics | Temperaments | Ensemble l'Itinéraire |
| Azguime | Miguel | <i>Mes ententes pour quatre personnages</i> | 2012 | Sax Quartet | Portuguese Music Research & Information Centre | Quasar |
| Bacon | Alexis | <i>Ötzi</i> | 2017 | Tenor Sax + Electronics | Caramuru Music | Wilson Poffenberger |
| Bång | Malin | <i>delta waves</i> | 2007 | Tenor Sax | Composer | Jörgen Peterson |

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|-------------|------------------|-------------------------------------|--|------|--|----------------|---------------------------|
| Besingrand | Jean-Patrick | 23 | | 2019 | Sax Sextet | Composer | Nitchan Pitayathorn |
| Besingrand | Jean-Patrick | <i>Brouillard d'hiver</i> | | 2019 | Tenor Sax | Composer | Erin Rogers |
| Besingrand | Jean-Patrick | <i>Cinq regards sur l'horizon</i> | | 2014 | Tenor Sax | Composer | Christopher De Louis |
| Besingrand | Jean-Patrick | <i>Dérive en rouge</i> | | 2012 | Sax Ensemble | Composer | |
| Besingrand | Jean-Patrick | <i>Des papillons...morts aussi</i> | | 2019 | Soprano Sax | Composer | Marie Kikuchi |
| Besingrand | Jean-Patrick | <i>Désirs inassouvis</i> | | 2018 | Sax Duo | Composer | Nitchan Pitayathorn |
| Besingrand | Jean-Patrick | <i>Instants Éphémères</i> | | 2014 | Sax Quartet | BabelScores | SaxOpen |
| Besingrand | Jean-Patrick | <i>Konohama</i> | | 2017 | Ensemble (Sax in ensemble) | Composer | |
| Besingrand | Jean-Patrick | <i>La lutte pour la lumière</i> | | 2019 | Baritone Sax + Electronics | Composer | Pisot Manatchinapisit |
| Besingrand | Jean-Patrick | <i>Réminiscence</i> | | 2017 | Sax + Piano + Percussion | Composer | Contemporaneous |
| Besingrand | Jean-Patrick | <i>Sous les cheveux, la rage</i> | | 2021 | Soprano Sax | Composer | Gerald Preinfalk |
| Besingrand | Jean-Patrick | <i>Un rêve éveillé</i> | | 2015 | Sax Quartet | Composer | Quatuor Avena |
| Black | Annesley | <i>Miniature</i> | | 2005 | Sax Quartet | Juliane Klein | Con Calore Quartet |
| Cano Valiño | Rocío | <i>Antanáklasi II</i> | | 2019 | Bass Sax + Electronics | Composer | |
| Carloséma | Bernard | <i>Clepsydre</i> | | 1998 | Bass, Tenor, & Soprano Sax + Electronics | Fuzeau | Jean-Michel Goury |
| Cella | Carmine-Emanuele | <i>Improvviso Statico II</i> | | 2014 | Tenor Sax + Electronics | Suvini Zerboni | Mario Marzi |
| Corajod | Mathieu | <i>Axes</i> | | 2021 | Soprano Sax + Flute | BabelScores | Duo Alto |
| Corajod | Mathieu | <i>Critical Control Points</i> | | 2020 | Alto Sax + Piano + Percussion + E. Guitar | BabelScores | |
| Corajod | Mathieu | <i>Subspheres</i> | | 2021 | Sax Duo | BabelScores | Duo Eventuell |
| Czernowin | Chaya | <i>Irrational</i> | | 2022 | Sax Quartet | Schott | Ensemble du Bout du Monde |
| Dempster | Thomas | <i>the bunyip</i> | | 2014 | Alto Sax + Electronics | Composer | |
| Dimou | Stylianos | <i>~Drops~</i> | | 2017 | Sax Quartet | Composer | Quartet Iberosudamericano |
| Dimou | Stylianos | <i>Machine Learning</i> | | 2018 | Baritone Sax + Electronics | Composer | Fred Lerdahl |
| Dimou | Stylianos | <i>sur les traces de la fissure</i> | | 2018 | Baritone Sax + Violin + Percussion + Accordion | Composer | |
| Eckardt | Jason | <i>a fractured silence</i> | | 2004 | Sax Quartet | Composer | PRISM Quartet |
| Fallahzadeh | Sina | <i>Najir</i> | | 2016 | Baritone Sax + Electronics | Composer | |

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|-----------------|------------|---|------|--|-----------------------------|-----------------------------|
| Frigon | Michel | <i>Geyser Ghetto</i> | 2005 | Sax Quartet | Unpublished | Quasar |
| Gabriele | Claudio | <i>Arriflex 35</i> | 2010 | Tenor Sax + Electronics | Composer | Jeffrey Vickers |
| Gabriele | Claudio | <i>NEUMA 31</i> | 2012 | Sax | Composer | Denis Schaffer |
| Gabriele | Claudio | <i>SHIFT SHAFF</i> | 2009 | Sax Quartet | Composer | |
| Geiss | Philippe | <i>Calderosaxo</i> | 2012 | Sax Ensemble | Composer | Jean Michel-Goury |
| Gimenez-Comas | Nuria | <i>Clarière quan même</i> | 2024 | Soprano Voice + Flute + Percussion + Piano + Electronics | Unpublished | Proxima Centauri |
| Girard-Charlest | Émilie | <i>Bestiaire</i> | 2017 | Sax Quartet | Unpublished | Quasar |
| Grafe | Max | <i>Anemoi Dances</i> | 2020 | Alto Sax + Bb Clarinet | American Composers Alliance | Duo Entre-Nous |
| Hamel | André | À huit | 2001 | Sax Octet | Unpublished | Quasar |
| Havel | Christophe | <i>Analog 21•12</i> | 2021 | Ensemble | Composer | |
| Havel | Christophe | <i>Eden</i> | 2021 | Ensemble | Composer | |
| Havran | Thomas | <i>Overcaffinat</i> | 2021 | Tenor Sax | Composer | Noa Even |
| Heyn | Volker | <i>Buon natale, fratello Fritz</i> | 1985 | Soprano + Tenor Sax | Breitkopf & Härtel | Daniel Kientzy |
| Hoffmann | Robin | <i>Der blutige Schaffner</i> | 1996 | Sax Quartet | P.J. Tonger | Ensemble Atmosphere |
| Ibarra | Victor | <i>Grande Équerre: ensayo sobre la negación</i> | 2014 | Sax Quartet | Composer | Sigma Project |
| Ibarra | Victor | <i>Homenaje a Francisco Toledo</i> | 2014 | Sax + Ensemble | Composer | |
| Ibarra | Victor | <i>Insight</i> | 2023 | Baritone Sax | Composer | Pablo Coello |
| Iberg | Helge | <i>Ut å stjæle hester</i> | 2016 | Tenor Sax + Viola + Piano | Composer | Trio Brax |
| Kasprzyk | Cory | <i>Split Tree (Wintergarden)</i> | 2014 | Sax Ensemble + Electronics | Composer | |
| Katzer | Georg | <i>Dialog Imaginär 6</i> | 1995 | Tenor Sax + Electronics | Verlag | Johannes Ernst |
| Krämer | Reiner | <i>Stück</i> | 2016 | Sax + Flute + Electronics | Composer | Jeffrey Kyle Hutchins |
| Lauba | Christian | <i>Les Sept Illes</i> | 1988 | Sax Ensemble + Piano | Composer | Jean-Marie Londeix |
| Lazcano | Ramon | <i>Jalkin</i> | 2012 | Sax Quartet | Chant du Monde | Sigma Project |
| Lee | Junghae | <i>Kyol</i> | 2017 | Saxophone Ensemble | Composer | Zurich Saxophone Collective |
| Lemay | Robert | <i>La rédemption... hommage à Martin Scorsese</i> | 1994 | Sax Quartet + 2 Percussion | Canadian Music Centre | |
| Lemay | Robert | <i>No Limits</i> | 2003 | Contrabass Sax | Canadian Music Centre | Serge Bertocchi |

| | | | | | | |
|--------------------|---------------|--|-----------|--|-----------------------|---------------------------|
| Lemay | Robert | Noirs | 2023 | Tenor Sax + Soprano Sax (1 player) + String Quartet | Note en Bulle | Don-Paul Kahl |
| Lemay | Robert | <i>Red Shift/Blue Shift</i> | 2012 | Baritone Sax + Cello | Note en Bulle | |
| Lemay | Robert | <i>Shadows of Bamian</i> | 2001-2002 | Sax Quartet | Canadian Music Centre | |
| Lemay | Robert | <i>Solitude Oubliée</i> | 1995 | Tenor Sax | Dobberman-Yppan | |
| Lemay | Robert | <i>Triptyque écarlate</i> | 1991 | Saxophone + Harp + Percussion | Canadian Music Centre | Daniel Gauthier |
| Lemay | Robert | <i>Un ciel variable pour demain</i> | 2003-2004 | Sax Quartet | Canadian Music Centre | |
| Leroux | Philippe | <i>L'Unique trait de Pinceau</i> | 2008 | Soprano and Baritone Sax (one player) + Orchestra | Billaudot | Claude Delangle |
| Lillios | Elainie | <i>Veiled Resonance</i> | 2008 | Soprano Sax + Electronics | Composer | Steve Duke |
| Litwin | Nahuel | <i>The Reconstruction of Ouisconsin</i> | 2022 | Sax + Soprano Voice + Flute + Percussion + Piano + Electronics | Composer | Proxima Centauri |
| López-López | José Manuel | <i>Simog/Civitella</i> | 2011 | Sax Quartet | Lemoine | Sigma Project |
| Luc | María Eugenia | <i>Air Mirrors</i> | 2018 | Tenor Sax + B♭ Clarinet | Composer | Duo Entre-Nous |
| Luc | María Eugenia | <i>YUN</i> | 2012 | Sax Quartet | Composer | Sigma Project |
| Luc | María Eugenia | <i>Zeruan</i> | 2020 | Sax Quartet | Composer | Ensemble du Bout du Monde |
| Makan | Keeril | <i>Voice Within Voice</i> | 2005 | Baritone Sax | PSNY | Brian Sacawa |
| Manotskov | Alexander | <i>Seven Portraits</i> | 2011 | Alto Sax + Orchestra | Donemus | Ola Asdahl Rokkones |
| Martínez Hernandez | Diego Alonso | <i>Soliloquio</i> | 2022 | Sax Duo | Composer | |
| Matitta | Jean | <i>Las Américas: I Samba do Diabo</i> | 2019 | Sax Ensemble | Composer | Jean-Marie Londeix |
| Miereanu | Costin | <i>DO-MI-SI-LA-DO-RE</i> | 1980-1981 | Saxophone + Electronics | Salabert | Daniel Kientzy |
| Minakakis | Stratis | <i>For Felipe M.</i> | 2021 | Baritone Sax | Composer | Don-Paul Kahl |
| Minakakis | Stratis | <i>Thalassografia A</i> | 2018 | Sax Quartet | Composer | Ensemble du Bout du Monde |
| Momi | Marco | <i>Cinque Nudi</i> | 2012 | Tenor Sax + Stomp Boxes | Zerboni | David Brutti |
| Moore | Ted | <i>Hollow</i> | 2018 | Alto Sax + Electronics | Composer | Kyle Hutchins |
| Musikantow | Joshua | <i>Ashera</i> | 2019 | Sax Trio | Composer | Acute Trio |
| Nešić | Snežana | <i>Quatre graffitis pour le début du temps</i> | 2022 | Sax Quartet | Unpublished | Quasar |
| Núñez | Nuria | <i>Fake (for real</i> | 2014 | Sax Quartet | Composer | Sax Quartet |

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|------------------|----------------|--|-----------|--|---|---------------------|
| Oliveiro | Mark | <i>Bone - Crest - Frequency</i> | 2018 | Sax Quartet | Composer | Nexas Quartet |
| Oliver | Joan Jordi | <i>Breathe</i> | 2017 | Alto Sax + Electronics | Composer | Joan Jordi Oliver |
| Pape | Gérard | <i>Makbennach I, III (solo)</i> | 1996 | Baritone & Alto Sax + Orchestra + Electronics | Composer | Daniel Kientzy |
| Parra | Hector | <i>Sigma-Waves</i> | 2015 | Sax Quartet | Composer | Sigma Project |
| Pettersen | Agnes Ida | <i>KPUN</i> | 2022 | Tenor Sax + Mixed Ensemble (2 Musicians) + Tape | Composer | Zwei-Mann-Orchester |
| Pont Anglada | Bernat | <i>How to Bread</i> | 2022 | Sax + Flute + Percussion + Piano + Electronics | | Proxima Centauri |
| Posadas | Alberto | <i>Senderos que se bifurcan</i> | 2017 | Sax Quartet | Durand | Sigma Project |
| Ralli | Eleni | <i>Go Within</i> | 2020 | Tenor Sax + Embedded Speaker | Composer | Don-Paul Kahl |
| Risset | Jean Claude | <i>Voilements</i> | 1987 | Tenor Sax + Electronics | Salabert | Daniel Kientzy |
| Roald | Helge | <i>UT OG STJÆLE HESTER</i> | 2015 | Tenor Sax + Viola + Piano | Composer | Trio Brax |
| Rokkones | Ola Asdahl | <i>Jeg lagde meg så stille</i> | 2016 | Alto Sax | Composer | Ola Asdahl Rokkones |
| Rolin | Etienne | <i>Partita Polyfolia</i> | 1995 | Tenor Sax | Robert Martin | |
| Rotella | Didier | <i>Mogari</i> | 2021 | Sax + Flute + Percussion + Piano + Electronics | Composer | Proxima Centauri |
| Rua | Vitor | <i>Saxopera II</i> | 2001 | Tenor Sax + Electronics | Portugese Music Research & Information Centre | Proxima Centauri |
| Rubbert | Rainer | <i>Vision (Urban Music II)</i> | 1993 | Bass or Baritone Sax | Verlag | Johannes Ernst |
| Rudel Rey | Demian | <i>Paráklisis</i> | 2022 | Sax + Flute + Percussion + Piano + Video + Electronics | Unpublished | Proxima Centauri |
| Sánchez-Verdú | José M. | <i>Khôra I</i> | 2013 | Sax Quartet | Breitkopf | Sigma Project |
| Sánchez-Verdú | José M. | <i>Khôra II</i> | 2014 | Sax Quartet | Breitkopf | Sigma Project |
| Shi | Pei Yu | <i>Gedicht vom wind des herbstes</i> | 2007 | Sax + Piano + Percussion + Electronics | Unpublished | |
| Skoglund | Lars | <i>Scener fra et nabolog</i> | 2015 | Tenor Sax + Mixed Ensemble (2 Musicians) + Tape | Composer | Zwei-Mann-Orchester |
| Stifell | Erik | <i>Zwei-Mann Orchester</i> | 2015 | Tenor Sax + Mixed Ensemble (2 Musicians) + Tape | Composer | Ola Asdahl Rokkones |
| Stifell | Erik | <i>Alo</i> | 2018 | Tenor Sax (also Baritone Sax) + Sinfonietta | Composer | IBSUD |
| Tarrés | Ariadna Alsina | <i>flickering sparks in connecting tunnels</i> | 2022 | Sax Quartet + Electronics | Composer | Zwei-Mann-Orchester |
| Tarrés | Ariadna Alsina | <i>Les Rêves Circulaires</i> | 2018 | Alto Sax + Electronics | BabelScores | Nahikari Oloriz |
| Teruggi | Daniel | <i>Xatys I</i> | 1988 | Sax + Electronics | Unpublished | Daniel Kientzy |
| Teruggi | Daniel | <i>Xatys III</i> | 1988 | Sax + Electronics | Unpublished | Daniel Kientzy |
| Tidrow | Thierry | <i>Entre Nous</i> | 2022 | Musical Theater | Unpublished | Quasar |
| Torres Maldonado | Javier | <i>Huayra Yana</i> | 2019 | Baritone Sax + Electronics | Zerboni | Stéphane Sordet |
| Torres Maldonado | Javier | <i>MASIH</i> | 2012-2013 | Sax Quartet | Zerboni | Sigma Project |

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|-------------|---------|------------------------------|------|------------------------|--------------------------|
| Torstensson | Klas | <i>Solo</i> | 1988 | Bass Sax | Muziekgroup Nederland |
| Tzortzis | Nicolas | <i>Member</i> | 2020 | Solo Baritone Sax | Composer |
| Vaggione | Horacio | <i>Thema</i> | 1985 | Bass Sax + Electronics | Salabert |
| Wanamaker | Gregory | <i>Without</i> | 2019 | Sax Quartet | Composer |
| Williams | Amy | <i>Child's Play</i> | 2014 | Sop Sax + Percussion | Composer |
| Young | Bethany | <i>I'll Bleed Your Lines</i> | 2020 | Ensemble | 113 Composers Collective |

Interviews

The interviews listed below offer valuable insights into the practices of composers who have incorporated SWMP techniques into their work. Although these discussions were largely informal, they aimed to explore the composers' specific works, their broader practices, and their general perspectives on SWMP techniques. Among others, the questions cover topics such as notation, challenges encountered by performers, and the future potential of these techniques.

Several of these interviews, conducted in 2017 before the widespread use of Zoom, are of low quality and are audio-only recordings. Despite these limitations, they provide enlightening discussions that reveal the composers' thoughts and approaches.

Additionally, I conducted an interview with Gail B. Levinsky, a saxophonist and researcher, focusing on early saxophone methods from the 1920s and 1930s. This conversation provides a historical context that complements the more contemporary discussions with the composers.

Eleni Ralli - 20 August 2024:

<https://youtu.be/Mq4W04Xfdqw?si=Pe7QKFyKJDmauUEU>

Stylianos Dimou - 19 August 2024:

<https://youtu.be/goRFoXap-fM?si=9PPSbrleSrlobjLs>

Jean-Patrick Besingrand - 1 December 2023:

https://youtu.be/kVLTUopIdI8?si=s_u8DkdlFKFiHKBg

Robert Lemay - 15 November 2023:

https://youtu.be/8k3jNXSnY4s?si=Y76sDpFuFeOxGK_o

Javier Torres Maldonado - 13 December 2023:

<https://youtu.be/O0WlesLY-30?si=gLlpSVpctoqLR474>

Juan Arroyo - 3 November 2017:

<https://youtu.be/wUJzyAoSU8c?si=ByJYUQSV4FINAkIC>

Robin Hoffmann - 5 November 2017:

<https://youtu.be/7ydsazKRMCM?si=D2kioeLZ8-Qdn6AI>

Gail B. Levinsky - 23 August 2024:

https://youtu.be/Kfwq1GHeZbg?si=tiNzUgj_RnR089oF