

Why Don't Jazzpersons Use These Chords?

Warren Burt

A chart of the 12 most common jazz 7th chords was given in a music theory book. To this list, a 13th chord (which was not a 13th chord) was added, and the chords were turned into 9th chords. These chords are used as "fingering templates" and applied to a scale of odd numbered harmonics 1-25, without the 23rd harmonic. This produces the following scale:

Harmonics:

4	17	9	19	5	21	11	6	25	13	7	15
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1/1	17/16	9/8	19/16	5/4	21/16	11/8	3/2	25/16	13/8	7/4	15/8
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Just-Intonation Ratios:

The set of 13 chords is played 12 times, each at a different transposition. Because of the unequal nature of just-intonation scales, when each chord, or "fingering template" is transposed to another degree of the scale, a different sounding chord results. Some of these chords are quite consonant, while some are quite dissonant. The difference between some of the chord types at different transpositions is quite subtle, other differences are quite marked, showing that in just-intonation there is the potential for much greater dissonance AND much greater consonance than 12-tone equal temperament provides.

The chords on the harmonics derived scale are worked through, then the whole thing is turned upside down to be played on a scale of sub-harmonics, which is the following scale:

Sub-Harmonics:

4	17	9	19	5	21	11	6	25	13	7	15
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1/1	32/17	16/9	32/19	8/5	32/21	16/11	4/3	32/25	16/13	8/7	16/15
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Just-Intonation Ratios:

In live performance, a keyboard synthesizer or sampler should be used. The instrument MUST be capable of being tuned into the above scales, and should use an electric piano type sound, with the addition of reverb. In the notation, double sharps and flats are frequently used. These do NOT apply to the intonation of the piece – the harmonic and subharmonic numbers over the notes do that. The double sharps / flats notation is merely used to preserve the original (visual notational) identity of the jazz chords while transposed.

The overall piece is about 45 minutes long. The pause between the first and second parts should only be long enough for the change of tuning to take place. Hopefully, this should only involve loading a different tuning file into the synthesizer/sampler software being used.

54

5 7 19 21 15 19

17 6 17 13

Ped. Ped.

60

21 15 19 21 4 19 5 4 19

17 6 17 13 17 25

Ped. Ped. Ped.

67

11 15 19 21 7 19

17 25 17 25

Ped. Ped.

75

5 7 19 11 4 19 11 4 5

17 25 17 25 9 13

Ped. Ped. Ped.

82

11 17 5 21 4 5

9 13 9 13

Ped. Ped.

90

21 4 5 21 15 5 11 4 5

9 25 9 25 9 7

Ped. Ped. Ped.

98

11 4 5 11 17 5 21 17 5

9 25 9 7 9 13

Ped. Ped. Ped.

159

25 9 11
25 19 11
6 9 11
5 15
Ped.

166

6 9 11
6 17 11
5 7
Ped.

174

25 9 11
25 9 11
25 19 11
5 4
5 7
Ped.

181

6 19 11
13 9 11
5 15
Ped.

189

25 17 11
6 17 11
13 19 11
5 15
Ped.

196

13 19 6
13 5 6
21 4
Ped.

204

25 19 6
25 19 6
25 9 6
21 4
21 15
Ped.

211

13 19 6.

21# 17

21# 15

Ped.

219

13 5 6.

25 5 6.

21# 17

21 4

Ped.

227

13 9 6.

25 9 6.

21 4

21 4

Ped.

235

7 5 25

7 21 25

11# 17

11# 17

Ped.

243

13 5 25

13 19 25

11# 17

11 4

Ped.

250

7 5 25

11x 9

11 4

Ped.

258

7 21 25

13 21 25

11x 9

11 17

Ped.

265

7 19 25 13 19 25

11 17

Ped.

273

15 21 25 15 21 13

11 17 6 9

Ped.

280

7 21 13 7 21 13

6 9 6 17

Ped.

288

7 5 13 15 21 13

6 17 6 19

Ped.

296

15 11 13 7 11 13

6 19 6 9

Ped.

304

15 5 13 7 5 13

6 9 6 9

Ped.

312

4 11 13 4 11 7

6 9 25 19

Ped.

319

Ped.

327

Ped.

334

Ped.

342

Ped.

349

Ped.

356

Ped.

364

Ped.

372

Ped. _____

379

Ped. _____

387

Ped. _____

394

Ped. _____

402

Ped. _____

409

Ped. _____

417

Ped. _____

425

Ped. Ped. Ped.

433

Ped. Ped.

441

Ped. Ped. Ped.

448

Ped. Ped.

456

Ped. Ped. Ped.

463

Ped. Ped.

Use a scale of subharmonics 4-25, with no 23rd subharmonic. Starting on C. Numbers above notes indicate subharmonic numbers. Electric Piano timbre, with reverb.

2: Jazz Chords in Subharmonics

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♩=84

4 6 4 6

Ped. Ped.

9 4 6 4 11 4 11

19 7 9 19 7 9 19 13 9

Ped. Ped. Ped.

16 4 25 4 11 4 11

5 7 9 5 7 9

24 4 25 4 6 4 6

5 15 9 19 15 9 21 7 9

Ped. Ped. Ped.

31 4 6 4 6 4 6

5 13 9 19 13 9

39 4 6 17 25 17 25 17 25

21 15 9 21 15 19 21 4 19

Ped. Ped. Ped.

46 17 25 17 6 17 6

5 15 19 5 15 19

Ped. Ped.

54 17 6 17 13 17 6

Ped. Ped. Ped.

61 17 13 17 25

Ped. Ped.

69 17 25 17 25 17 25

Ped. Ped. Ped.

76 17 25 9 13 9 13

Ped. Ped.

84 9 13 9 13 9 25

Ped. Ped. Ped.

91 9 25 9 7 9 7

Ped. Ped.

99 9 25 9 7 9 7

Ped. Ped.

105 *b* 9 13 *b* 9 13 *b* 9 13

Ped. Ped.

111 *b* 9 13 *b* 9 13 *b* 9 13

Ped. Ped.

117 *b* 9 13 19 7 19 7

Ped. Ped. Ped.

124 19 7 19 13 19 13

Ped. Ped.

132 19 13 19 15 19 13

Ped. Ped. Ped.

139 19 15 19 7 19 7

Ped. Ped.

147 19 7 19 7 19 7

Ped. Ped. Ped.

154

19 7 25 9 21 5 15 25 9 11 5 15

Ped. Ped.

162

5 15 25 19 11 5 15 6 9 11 5 15 6 9 11

Ped. Ped. Ped.

169

5 7 6 17 11 5 4 25 9 11 5 7

Ped. Ped.

177

5 7 25 9 11 5 4 25 19 11 5 7

Ped. Ped.

183

5 15 6 19 11 5 15 13 9 11 5 15 25 17 11

Ped. Ped. Ped.

190

5 15 6 17 11 5 15 13 19 11 5 15

Ped. Ped.

198

21 4 13 19 6 21 4 13 5 6 21 4 25 19 6

Ped. Ped. Ped.

206

21 15 25 19 6 21 15 25 9 6 21 17 13 19 6

Ped. Ped. Ped.

214

21 15 13 19 6 21 17 13 5 6

Ped. Ped.

222

21 4 25 5 6 21 4 7 19 6 21 4 13 9 6

Ped. Ped. Ped.

230

21 4 25 9 6 21 4 7 5 6

Ped. Ped.

237

11 17 11 17 11 17 7 5 25 21 25 13 5 25

Ped. Ped. Ped.

244

11 4 11 4 11 4 13 5 25 13 19 25

Ped. Ped.

252

11 9 11 9 11 4 11 4 7 5 25 7 5 25

Ped. Ped.

258

Measures 258-263. Treble clef: 11 9, 11 17. Bass clef: 7 21 25, 13 21 25. Pedal markings are present under measures 258-261 and 262-263.

264

Measures 264-270. Treble clef: 11 17, 11 17, 11 17. Bass clef: 15 5 25, 7 19 25, 13 19 25. Pedal markings are present under measures 264-266, 267-270, and 271-272.

271

Measures 271-278. Treble clef: 6 9, 6 9. Bass clef: 15 21 25, 15 21 13. Pedal markings are present under measures 271-274, 275-278, and 279-280.

279

Measures 279-285. Treble clef: 6 9, 6 9, 6 17. Bass clef: 15 11 13, 7 21 13, 7 21 13. Pedal markings are present under measures 279-282, 283-285, and 286-287.

286

Measures 286-293. Treble clef: 6 17, 6 19. Bass clef: 7 5 13, 15 21 13. Pedal markings are present under measures 286-289, 290-293, and 294-295.

294

Measures 294-300. Treble clef: 6 17, 6 19, 6 9. Bass clef: 15 21 13, 15 11 13, 7 11 13. Pedal markings are present under measures 294-297, 298-300, and 301-302.

301

Measures 301-307. Treble clef: 6 9, 6 9. Bass clef: 4 21 13, 15 5 13. Pedal markings are present under measures 301-304, 305-307, and 308-309.

309

6 9 6 9 25 19

7 5 13 4 11 13 4 11 7

Ped. Ped. Ped.

316

25 19 25 19

4 6 7 15 11 7

Ped. Ped.

324

25 9 25 9 25 5

15 11 7 15 21 7 4 11 7

Ped. Ped. Ped.

331

25 9 25 5

4 11 7 4 6 7

Ped. Ped.

339

25 19 25 19 25 19

15 6 7 17 11 7 4 21 7

Ped. Ped. Ped.

347

25 19 25 19 13 5

15 21 7 17 6 7 17 6 15

Ped. Ped. Ped.

355

13 5 13 5

17 25 15 4 6 15

Ped. Ped.

363

13 19

4 6 15

Ped.

13 19

4 11 15

Ped.

13 21

17 6 15

Ped.

370

13 19

17 6 15

Ped.

13 21

17 25 15

Ped.

378

13 5

4 25 15

Ped.

13 5

9 6 15

Ped.

13 5

17 11 15

Ped.

385

13 5

4 11 15

Ped.

13 5

9 25 15

Ped.

393

7 21

9 25 4

Ped.

7 21

9 13 4

Ped.

7 21

17 25 4

Ped.

401

7 5

17 25 4

Ped.

7 5

17 6 4

Ped.

7 11

9 25 4

Ped.

409

7 5

9 25 4

Ped.

7 11

9 13 4

Ped.

417 7 21 7 21 7 21

Ped. Ped. Ped.

424 7 21 7 21

Ped. Ped.

432 15 11 15 11 15 11

Ped. Ped. Ped.

439 15 21 15 21

Ped. Ped.

447 15 6 15 21 15 6

Ped. Ped. Ped.

454 15 11 15 11

Ped. Ped.

462 15 11 15 11

Ped. Ped.

466

15 11

5 7 17

Ped.