

Age: 18

Previous music (listening) experience:

Classical / contemporary musician / composer
+ amateur sound engineer.

For each test please write down:

- 1) If you can hear a difference between the samples?
- 2) How you would describe this difference?
- 3) The clarity of Sample A rated from 1 (clear) to 5 (muffled).
- 4) The clarity of Sample B rated from 1 (clear) to 5 (muffled).

Test	Difference	Description of Difference	A clarity	B clarity
1	Yes	Track B is muffled in high-mids/highs	1	3
2	No		1	1
3	Yes	slight EQ change	1	1
4	Yes	EQ of highs absent (especially in drums) lower bit rate?	1	3
5	No		1	1
6	Yes	Boxed sound on both tracks, mids boosted. Track B boosted at a slightly higher frequency	3	2
7	No		2	2
8	Yes	Track A very "rawny" track B lacking high frequencies, vocals more prominent	2	3
9	No		1	1
10	Yes	Track A has a slightly clearer, more "open" sound.	1	2
11	No		1	1
12	Yes	Track B has better clarity in the high frequencies	2	1
13	No		2	2
14	No	clearer vocals	1	1
15	Yes	Track A lacks high frequencies, Track B has good high frequencies but the sound is slightly	2	2
16	Yes	Track B has much more clarity (distorted) and presence in highs	2	1
17	Yes	Same as previous except with a greater difference	2	1
18	Yes	Track B is slightly "fatter" in a frequency slightly higher than A's	1	1
19	Yes	Track B is slightly distorted in the lower frequencies	1	1

Age: 20

Previous music (listening) experience:

Self-taught musician

For each test please write down:

- 1) If you can hear a difference between the samples?
- 2) How you would describe this difference?
- 3) The clarity of Sample A rated from 1 (clear) to 5 (muffled).
- 4) The clarity of Sample B rated from 1 (clear) to 5 (muffled).

Test	Difference	Description of Difference	A clarity	B clarity
1	✓	Diff. in clarity	1 1	5
2	✓	Diff. in bass	1	1
3	✓	More treble in B	1	1
4	✓	B more rounded	1	2
5	✓		2	1
6	✓	Vocals louder in A	3	2
7	✓	A has more more bass	1	1
8	✓		1	3
9	✓	Vocals louder in B	2	3
10	✓		1	2
11	✓		1	1
12	✓	Cant Vocals softer in B	3	2
13	✓	Clarity diff.	1	2
14	X		2	2
15	✓	A more muffled	4	1
16	✓	Less bass in B	4	1
17	✓		4	1
18	✓	More bass in B	5	5

19 X

Age: 21

Previous music (listening) experience:

Sound Tech

For each test please write down:

- 1) If you can hear a difference between the samples?
- 2) How you would describe this difference?
- 3) The clarity of Sample A rated from 1 (clear) to 5 (muffled).
- 4) The clarity of Sample B rated from 1 (clear) to 5 (muffled).

Test	Difference	Description of Difference	A clarity	B clarity
1	Yes		1	5
2	Yes		3	2
3	Yes		3	1
4	Yes		3	2
5	No		2	2
6	Yes		3	2
7	Yes	Difference in highs	3	2
8	Yes		2	4
9	No		1	1
10	Yes	B sounds warmer	1	1
11	Yes		1	2
12	No		4	4
13	Yes		4	5
14	No		3	3
15	Yes	A-muffled B-tinny	4	3
16	Yes	B-dynamic range	4	2
17	Yes		4	2
18	Yes		3	4
19	Yes	surprisingly small difference	1	2

Age: 22

Previous music (listening) experience:

Sound tech student.

For each test please write down:

- 1) If you can hear a difference between the samples?
- 2) How you would describe this difference?
- 3) The clarity of Sample A rated from 1 (clear) to 5 (muffled).
- 4) The clarity of Sample B rated from 1 (clear) to 5 (muffled).

Test	Difference	Description of Difference	A clarity	B clarity
1	Yes	It seems to me as though the higher frequencies on track A are more prominent	1	5
2	No		2	2
3	Yes	I think that the first track as a subtle difference in it sounding tighter.	2	3
4	Yes	Track A sounds crisper.	2	4
5	Yes	Track A sounds warmer to me	2	2.
6	Yes	It sounds like both tracks have a high pass filter on.	4	2
7	Yes	Track B has a tighter and more distinct low end.	3	2
8	Yes	Track A sound clearer but track B sounds warmer.	2	3
9	Yes	I think I hear the vocals better on the 2nd track.	2	2
10	Yes	The guitar on the second track sounds warmer. The first track sounds crisper.	2	2.
11	Yes	Track B has crisper vocals	2	2.
12	Yes	Track B, the guitar sounds right at the front of the mix	3	2
13	No		2	2
14	No		2	2.
15	Yes	There is more 'high end' on the second track	3	2
16	Yes	Track B sounds clearer and less compressed.	3	2
17	Yes	Track B sounds warmer.	3	2
18	No		2	2.
19	Yes	Track B, sounds more compressed and more together (processed).	2	2.

Age: 23

Previous music (listening) experience:

Sound Tech (studies - 1 year). Sound engineering experience, 3 years
Audio programming 2 years

For each test please write down:

- 1) If you can hear a difference between the samples?
- 2) How you would describe this difference?
- 3) The clarity of Sample A rated from 1 (clear) to 5 (muffled).
- 4) The clarity of Sample B rated from 1 (clear) to 5 (muffled).

Test	Difference	Description of Difference	A clarity	B clarity
1	✓	A is clearer, B is more muddy + bass-y	1	3
2	no		1	1
3	no		1	1
4	✓	B: voice is clearer, background instruments blended (A: all tones clear)	1	3
5	no		2	2
6	✓	A: mixed well, everything fits nicely together B: guitar is too loud (can't hear voice so well)	1	1
7	no	B is more muffled, but makes guitar sound better (full sound)	2	2
8	✓	B is more muffled, but makes it sound more full.	1	2
9	no		2	2
10	✓	same as 8: B has a more full sound, A is sharp	1	2
11	no		2	2
12	✓	B is brighter, slightly clearer.	2	1
13	no		3	3
14	no		2	2
15	yes	A: muffled voice B: space created for voice to come out clear, but sounds a bit busy	3	1
16	yes	B: best mix of this track, can hear everything. A: can't hear much, very muffled	3	1
17	yes	B sounds like a rock mix. A is muffled. clear	3	1
18	no		1	1
19	no		1	1

Age: 23

Previous music (listening) experience:

Sound tech,

For each test please write down:

- 1) If you can hear a difference between the samples? ✓/X
- 2) How you would describe this difference?
- 3) The clarity of Sample A rated from 1 (clear) to 5 (muffled).
- 4) The clarity of Sample B rated from 1 (clear) to 5 (muffled).

Test	Difference	Description of Difference	A clarity	B clarity
1	✓	A → more treble B → thicker	1	3
2	✓	Slight instruments sound slightly less clear in B	1	2
3	✓	A → treble B → bass	1	1
4	✓	A → less clear instrument wise	2	1
5	X		1	1
6	✓	A → muffled (all frequencies)	3	1
7	X		2	2
8	✓	B → both voice & instruments muffled	1	4
9	X		1	1
10	✓	track B is more muffled but still okay.	1	3
11	✓	track B sounds slightly softer	1	2
12	✓	B → vocals are less clear but guitar still clear, A is very muffled.	5	2 3
13	✓	A → slightly clearer for vocals. B → seems slightly clear for lower frequencies	3	4
14	✓		2	3
15	✓	B → very clear	4	1
16	✓	B →	4	2
17	✓		5	1
18	X		3	3
19	X		4	4

Age: 23

Previous music (listening) experience:

BSc Honours in Computer Science (Audio Engineering)
Currently doing MSc in Computer Science (Audio Engineering)

For each test please write down:

- 1) If you can hear a difference between the samples?
- 2) How you would describe this difference?
- 3) The clarity of Sample A rated from 1 (clear) to 5 (muffled).
- 4) The clarity of Sample B rated from 1 (clear) to 5 (muffled).

Test	Difference	Description of Difference	A clarity	B clarity
1	✓	Track A's sound is a lot sharper	1	2
2	✓	"	1	2
3	X		2	2
4	✓	Track B slightly muffled.	2	3
5	X		2	2
6	✓	Less background noise in B, drums a lot clearer	3	2
7	X		2	2
8	✓	Track A much clearer	1	3
9	X		2	2
10	✓	Clarity in track A is better	1	2
11	X		2	2
12	✓	Same as 10	1	2
13	X		2	2
14	X			
15	✓	Track B substantially clearer	3	1 2
16	✓	"	3	1 2
17	✓	"	3	1
18	X		4	4
19	X		2 2	2

Age: 23

Previous music (listening) experience:

Majored in instrumental music at Rhodes University
(2012)

For each test please write down:

- 1) If you can hear a difference between the samples?
- 2) How you would describe this difference?
- 3) The clarity of Sample A rated from 1 (clear) to 5 (muffled).
- 4) The clarity of Sample B rated from 1 (clear) to 5 (muffled).

Test	Difference	Description of Difference	A clarity	B clarity
1	✓	clear versus muffled sound	1	5
2	✓	clear versus muffled sound	2	1
3	x	no difference	1	1
4	✓	clear versus muffled sound,	1	5
5	✓	clear versus muffled (slight)	2	1
6	✓	clear versus muffled sound	5	1
7	x	no difference	1	1
8	✓	clear versus muffled sound	1	5
9	✓	clear versus muffled (slight)	2	1
10	✓	clear versus muffled sound	1	5
11	✓	" " (slight)	1	2
12	✓	clear versus muffled sound,	5	1
13	✓	" " (slight)	1	2
14	x	no difference	1	1
15	✓	clear versus muffled sound	5	1
16	✓	clear versus muffled sound	5	1
17	✓	" "	5	1
18	x	no difference	1	1

Age: 24.

Previous music (listening) experience:

Music Student (Mmus)

For each test please write down:

- 1) If you can hear a difference between the samples?
- 2) How you would describe this difference?
- 3) The clarity of Sample A rated from 1 (clear) to 5 (muffled).
- 4) The clarity of Sample B rated from 1 (clear) to 5 (muffled).

Test	Difference	Description of Difference	A clarity	B clarity
1	yes.	B was more bass heavy	1	4.
2	no.		2	2
3	no.		2	2
4	no.		2	2
5	yes	Drums softer in track B.	2	2.
6	yes	Drums sounded distant(A)	2	1.
7	no.		3	3.
8	yes	Bass louder on B.	2	3.
9	no.		2	2.
10	yes	Vocals - removed lead lower.	1	2.
11	no.		2	2.
12	yes	Vocals softer on track B.	2	2.
13	no.		2	2.
14	no.		1	1.
15	yes.	Synth louder on track B.	2.	1
16	yes	Drums clearer on track B.	3	2.
17	yes	Vocals clearer on track B.	3	1
18	yes.	Track B sounded "Rounder"	2	2.
19	yes	Synth softer on B	1	3.

Age: 24

Previous music (listening) experience:

* Some sound technician experience * Sound tech 1 + honours

For each test please write down:

- 1) If you can hear a difference between the samples?
- 2) How you would describe this difference?
- 3) The clarity of Sample A rated from 1 (clear) to 5 (muffled).
- 4) The clarity of Sample B rated from 1 (clear) to 5 (muffled).

Test	Difference	Description of Difference	A clarity	B clarity
1	✓	B sounds dampened, A seems to have a fuller sound, A seems to have more access to high freq, breath	1	4
2	X	No difference.	3	3
3	✓	Almost no difference, cant explain why, just seem a bit different	3	3
4	✓	A has more breath, more open sound, fuller, B sounds a little like its underwater.	2	4
5	X	No noticeable difference.	3	3
6	✓	A sounds more natural, vox sound more natural than in B, but other instruments seem substituted in A	2 1/2	2
7	X	muffled vox, that's what the L12 is for, other instruments not so muffled	(3) 4 1/2	(3) 4 1/2
8	✓	B has a warmer sound, A none metallic sounding, but vox clearer, in A A generally clearer	2 1/2	3
9	X	No noticeable difference but with its metallic sounding, like the A of No 8.	2 1/2	2 1/2
10	X	No noticeable difference metallic sounding	2 1/2	2 1/2
11	X	No noticeable difference.	3 1/2	3 1/2
12	✓	high freq more audible in B, which makes B seem less muffled. vox muffled in both	2 1/2	2 1/2
13	X	no noticeable difference - clarity rating is quite high because digital sound of bus seems to be	3 1/2	3 1/2
14	X	changed rating for No 13 from 2 1/2 to 3 because this track is much clearer	2	2
15	✓	B is less muffled, more engagement with wide range of frequencies, more	2	3
16	✓	B has a fuller, clearer sound, almost closer than A	1 1/2	3 1/2
17	✓	Low freq highlighted in both. A lows seem less natural than lows in B	3 1/2	3 1/2 2
18	X	No noticeable difference.	4	4
19	X	No noticeable diff.	2 1/2	2 1/2

Age: 28

Previous music (listening) experience:

SOUND ENGINEER

For each test please write down:

- 1) If you can hear a difference between the samples?
- 2) How you would describe this difference?
- 3) The clarity of Sample A rated from 1 (clear) to 5 (muffled). 1 (muffled) to 5 (clear)
- 4) The clarity of Sample B rated from 1 (clear) to 5 (muffled). 1 (muffled) to 5 (clear)

Test	Difference	Description of Difference	A clarity	B clarity
1	✓	A - more high & mid freq.	3	2
2	✗		4	4
3	✓	B - more high frequencies	3	4
4	✓	A - hi-hat more pronounced	4	3
5	✗		4	4
6	✓	A - duller : B - more high freq	4 2	4 4
7	✗		2	2
8	✓	A - more high freq and more stereo	4	3
9	✗		4	4
10	✓	B - more low freq than A	4	3
11	✗		3	3
12	✓	B - more highs & stereo than A	2	2
13	✗		2	2
14	✗		2	2
15	✓	A - more bass B - more highs & stereo image	1	3
16	✓	A - sound tinny ^{and bassy} B - more highs & stereo image	1	3
17	✓	A - sounds tinny & bassy : B - more high freq	1	3
18	✗		2	2
19	✗		3	3

Age: 51

Previous music (listening) experience:

SOUND ENGINEER

For each test please write down:

- 1) If you can hear a difference between the samples?
- 2) How you would describe this difference?
- 3) The clarity of Sample A rated from 1 (clear) to 5 (muffled).
- 4) The clarity of Sample B rated from 1 (clear) to 5 (muffled).

Test	Difference	Description of Difference	A clarity	B clarity
1	YES	PAN DIFF - A MORE PAN THAN B	1	4
2	YES	B HAS SLIGHTLY MORE BASS PRES	1	1
3	YES	A u u a u u	1	1
4	YES	B has less vocal presence.	1	2
5	YES	B u more lower frequencies	1	1
6	YES.	BOTH HAVE POOR STEREO IMAGE	3	3/2
7	YES	A HAS MORE BASS PRES.	3	3 2
8	YES	VOX LOWER ON B, A TOO ^{BRITTE}	1	2
9	NO.		1	1
10	YES	A IS SLIGHTLY BRIGHTER.	1	1
11	NO !!		1	1
12	YES	B IS MORE MID RANGE HEAVY	1	7
13	YES	A HAS SLIGHTLY CLEAR VOX	1	1
14	NO.		2	2
15	YES	B CLEARER, MORE SPACE (ST)	2	1
16	YES	A VOX MUFFLED, ST COMPROMISED	3	1
17	YES	u u u a u u	3	1
18	YES	A SOUNDS WARMER	1	1

very stupid

2/2

19. YES VERY SIMILAR - A clearer, 1 ~~2~~ 2.

Age: 55

Previous music (listening) experience:

I'm a musician

For each test please write down:

- 1) If you can hear a difference between the samples?
- 2) How you would describe this difference?
- 3) The clarity of Sample A rated from 1 (clear) to 5 (muffled).
- 4) The clarity of Sample B rated from 1 (clear) to 5 (muffled).

1-5

Test	Difference	Description of Difference	A clarity	B clarity
1	<input checked="" type="checkbox"/>	Track A more clear sound	2	3
2		No dif	2	2
3		No dif	2	2
4	<input checked="" type="checkbox"/>	with more body	1 1/2	1 1/2
5		No dif		
6	<input checked="" type="checkbox"/>	B. a bit brighter than A.	1	1
7		No dif	1	1
8	<input checked="" type="checkbox"/>	Small dif. A a bit brighter	1	1 1/2
9	<input checked="" type="checkbox"/>	Here is otherways around	1 1/2	1
10		No dif	1	1
11		No dif	1	1
12	<input checked="" type="checkbox"/>	Small dif on B. (brighter)	1 1/2	1
13		No dif		
14		No dif		
15	<input checked="" type="checkbox"/>		3	1
16	<input checked="" type="checkbox"/>		3	1.
17	<input checked="" type="checkbox"/>		3 1/2	1 1/2
18	<input checked="" type="checkbox"/>		3'	3 1/2

19

No dif:

2 1/2 2 1/2