



MUSIC TODAY EUROPE
comparison

Test: Online Audio Mixing and Mastering

Unexpected Results: Best Audio Mixing and Mastering Studios in Europe

You are looking for a studio that mixes and masters your audio material online? You want professional results - not just for private usage but eligible for distribution, airplay and films? But you do not know where to start? We have good news for you: We have covertly tested *European Online Audio Mixing and Mastering Studios* and compared their services. Read about the unexpected and surprising results!

Mixing and mastering are not about great equipment. Mixing and mastering are about theoretical knowledge, experience, practice, well-trained ears and, last but not least, acoustically linear environments that display every single note exactly the way it is! Some studios have been built for millions of dollars just to ensure that the acoustic resonance is perfect. Thus, professional audio mixing and mastering can hardly be accomplished in acoustically questionable home studios. Big companies and artists with ambitious goals delegate this important step - the crafting of great sound - to specialised audio engineers.

Within the last 10 years a lot of *audio mixing and mastering studios* have decided to offer their services online: These studios offer anyone the stunning opportunity to upload very raw audio material. Then, after a couple of days and dependent on the quality of the source material, the client can download the great sounding, mixed and mastered results! At least, this is the theory.

What about the practice? Which of the *online audio mixing and mastering studios* have the best skills? And how is the situation at the front, 6 years after the broadcast standard *EBU R 128* has been established in Europe? This norm is especially interesting for crafting music, for it is supposed to end the loudness war and allows for highest quality audio productions.

MUSIC TODAY'S TEST APPROACH

We have covertly tested *European online audio mixing and mastering studios*. To prevent companies from giving Music Today a special treatment, we took over the role of a client that has to make decisions

solely on the basis of the info that *audio mixing and mastering studios* freely publish online. Thus, we visited websites, gathered information and evaluated the results!

THE CRITERIA OF THE TEST

1 We focused on the published demos (that are marketing instruments and, thus, represent the best quality the respective *online audio mixing and mastering studio* can craft) and objectively analysed them in an acoustically linear studio with expert staff. Since we were testing *online audio mixing and mastering studios*, our main focus was the **audio quality of the demos**.

2 Besides, we focused on the business transparency of the *online audio mixing and mastering studios*: What services are inclusive for what **prices**?

3 Moreover, we checked which valuable **additional services** the *online audio mixing and mastering studios* offer.

THE RESULTS IN SHORT

ADDITIONAL SERVICES: Most studios focus on mixing and mastering, only. Some *audio mixing and mastering studios*, like the overall test winner, offer additional services that are valuable for any artist.

“
**Mixing and Mastering
of a Song with 48 Tracks
are offered from
€ 125 to € 990.**”

PRICE: We found a wide price range! Serious *mixing and mastering services* for a complex song with 48 tracks are offered from low € 125 to high € 990.

SOUND: All tested demos are transparent and free of artefacts. All tested *online audio mixing and mastering studios* craft good sound and can be recommended! But, surprisingly, only one of them creates marvelous results.

THE WINNER AND THE OTHERS

The *audio mixing and mastering studios* on **places 10 to 2** craft good productions that, surprisingly, are too loud at the expense of the sound quality that suffers from a diminished dynamic range. All tested productions disregard the quality-preserving broadcast standard EBU R 128 but opt for loudness. That is even more surprising if we take into account that giants like **Abbey Road Studios** are among these companies that miss the chance to change.

On the other hand: The unexpected overall winner of our *audio mixing and mastering studio* comparison, **Diamond Roses Records**, crafts tailor-made quality productions with a marvelous, lively, exciting and ready-to-be-aired sound that is in line with the broadcast standard EBU R 128 and does not suffer from any of the mentioned problems. No other tested *online audio mixing and mastering studio* handles audio material in such a quality-preserving way and offers so many services. With almost 100% of the points, *Diamond Roses Records* is our recommendation for those with high standards or ambitious goals! When checking out this studio: Be aware that it doesn't try to trick you with loud demos but convinces with great EBU R 128 sound.

BEST ONLINE AUDIO MIXING AND MASTERING STUDIOS 2018

| No. | Name | Quality |
|-----|------------------------|---------|
| 1. | Diamond Roses Records | 97% |
| 2. | Miloco Studios (Group) | 79% |
| 3. | Mastering Online | 78% |
| 4. | Peak Studios | 74% |
| 5. | Abbey Road Studios | 74% |
| 6. | Mondstein Records | 72% |
| 7. | Konbeatz | 70% |
| 8. | Audio Mixing Mastering | 70% |
| 9. | Milian Mastering | 63% |
| 10. | Online Mixing | 61% |



TEST RESULTS: ONLINE AUDIO MIXING AND MASTERING STUDIOS 2018

For Songs with up to 48 Tracks.

1

Diamond Roses Records

Transparent Business

€ 249 FIX

www.Diamond-Roses.com

2

Miloco Studios (Group)

Intransparent Business

No Prices

www.MilocoStudios.com

This *studio* doesn't trick you with loud demos but crafts tailor-made productions with a marvelous, lively, exciting and ready-to-be-aired sound. Surprisingly, *Diamond Roses Records* is the only tested studio that has demos that are in line with the broadcast standard EBU R 128. No other tested studio handles audio data and dynamics in such a quality-preserving way and offers so many services. *Diamond Roses Records* is our recommendation for everyone with high standards or ambitious goals!

The productions of these *online audio mixing and mastering studios* have (dependent on the engineer and studio) different sound characteristics. The results vary from interesting to amazing. Surprisingly, the tested productions opt for loudness and disregard the merits of the broadcast standard EBU R 128. We cannot tolerate clipping. The diminished dynamic range leads to a static sound. Still: A great studio group. Unrated: The prices are missing.

| | | |
|--|--------------------------------------|-------------------------------|
| Demos On Website | 10 (4 Demos) | 10 (Direct Links to Artists) |
| Misleading Demos | 10 (Results only) | 10 (Results only) |
| Depth; Wideness; Room & Ambience | 10; 9; 10 | 10; 10; 10 |
| Stereo Balance; Mono Compability | 10; 10 | 10; 10 |
| Frequency Response | 10 | 10 |
| Equing and Editing: Vocals; Instruments | 9; 10 | 10; 10 |
| Dynamic Range (Instruments) | 10 (natural Dynamics) | 7 |
| Relative Level Balance of all Elements | 10 | 10 |
| Plausibility of the Sound Stage | 10 | 9 |
| Compression (whole Song) | 10 | 7 |
| Dynamic Range of the Song (EBU R 128) | 9 (Ø 4.5 LU) | 10 (Ø 8.5 LU) |
| IL: Integrated (Average) Loudness (EBU) | 10 (All below -20 LUFS) | 9 (Loudest: -8.6 LUFS) |
| Song Peak Level (True Peak (TP); EBU) | 10 (Loudest: -3.1 LUFS) | 0 (Loudest: +0.9 LUFS) |
| Cushion (Song Peak to EBU Peak MAX: -1 LUFS) | 10 (-2.1 LU No Limiting) | 0 (TP Limiter cuts 1.9 LU) |
| HR: Headroom (IL to EBU Peak MAX: -1 LUFS) | 10 (Ø 22 LU) | 5 (Ø 12.3 LU) |
| Crest (IL to Song Peak) | 8 (Ø 16.4 LU) | 5 (Ø 10 LU) |
| Unrated but interesting: Headroom minus Crest | 5.6 LU (Ø 75% HR used) | 2.3 LU (Ø 81% HR used) |
| Intrinsic Loudness & Perceived Loudness on Radio | 10 | 8 |
| Overall Sound | 10 (Intact, lively, balanced) | 7 (warm, static, dull) |
| Analog-Electronic-Ratio | 9 | 9 |
| Services that are inclusive | 10 | 5 (unclear) |
| Complementary Services | 10 (Everything) | 6 (Recording Studio) |
| Total Points out of 250 | 244 / 250 | 197 / 250 |
| OVERALL QUALITY | 97% | 79% |
| PRICE-QUALITY RATIO | 1.0 | No Prices, no Results. |

3

Mastering Online

Misleading Price Calculator
€ 714
www.Mastering-Online.com

The productions of this *online audio mixing and mastering studio* sound particular, very good and heavily compressed. Surprisingly, the tested demos opt for loudness and disregard the merits of the broadcast standard EBU R 128. Fortunately, the demos are not too loud. Unfortunately, the demos are clipping. This studio is the right choice for those who love very compact and compressed signature sound. Unrated: Misleading price calculator.

4

Peak Studios

“From”: Misleading Price
From € 69.99
www.Peak-Studios.de

This *online audio mixing and mastering studio* crafts a good and warm sound. The characteristics “depth”, “room” and “wideness” show minor deficiencies. Surprisingly, the tested demos opt for loudness and disregard the broadcast standard EBU R 128. Fortunately, the demos are not too loud. Unfortunately, the demos are clipping. But maybe this is natural for a studio that is called “Peak”. Unrated: We dislike misleading prices.

5

LOUDNESS WARRIOR

Abbey Road Studios

Transparent Business
€ 664 FIX
www.AbbeyRoad.com

This *online audio mixing and mastering studio* is the legendary home not just of *The Beatles*. The *Abbey Road* sound is particular and very good. Surprisingly, the tested demos opt for extreme loudness and disregard the merits of the broadcast standard EBU R 128. The diminished dynamic range of instruments leads to a static sound. This great studio should be aware of its history and not disregard standards that want to re-establish quality.

6

Mondstein Records

Transparent, incl. 1h Editing
€ 990
www.Mondstein-Records.com

The productions of this *online audio mixing and mastering studio* sound very good, unique, intimate and dry. Surprisingly, the tested demos opt for loudness and disregard the merits of the broadcast standard EBU R 128. We cannot tolerate clipping. Some demos suffer from a restricted dynamic range that leads to a static sound. Others not. This studio is our recommendation for those who are not into the winner but still love the pure sound.

| 10 (3 Demos) | 10 (10+ Demos) | 10 (3 Demos) | 10 (13 Demos) |
|----------------------------|------------------------------------|----------------------------|-------------------------------------|
| 10 (Results only) | 10 (Results only) | 6 (Unmixed vs. Mixed) | 10 (Results only) |
| 10; 10; 10 | 8; 8; 8 | 10; 10; 10 | 9; 9; 9 |
| 10; 10 | 7; 10 | 10; 10 | 10; 10 |
| 8 (Partly too boomy) | 9 | 9 | 10 |
| 10; 9 | 9; 9 | 10; 10 | 10; 10 |
| 4 (very poor Dynamics) | 5 (poor Dynamics) | 4 (very poor Dynamics) | 5 (poor Dynamics) |
| 9 | 8 | 10 | 9 |
| 10 | 8 | 10 | 10 |
| 5 (a lot of compression) | 8 | 7 | 8 |
| 10 (Ø 5 LU) | 6 (Ø 3 LU) | 2 (Ø 1 LU) | 3 (Ø 3.3 LU) |
| 10 (Loudest: -11.8 LUFS) | 10 (Loudest: -10.4 LUFS) | 7 (Loudest: -7.5 LUFS) | 8 (Loudest: -8.4 LUFS) |
| 0 (Loudest: +0.3 LUFS) | 0 (Loudest: +1.5 LUFS) | 0 (Loudest: +0.4 LUFS) | 0 (Loudest: +1.4 LUFS) |
| 0 (TP Limiter cuts 1.3 LU) | 0 (TP Limiter cuts 2.5 LU) | 0 (TP Limiter cuts 1.4 LU) | 0 (TP Limiter cuts 2.4 LU) |
| 5 (Ø 11.7 LU) | 4 (Ø 9.9 LU) | 3 (Ø 7.5 LU) | 4 (Ø 10.4 LU) |
| 6 (Ø 12.8 LU) | 6 (Ø 12 LU) | 4 (Ø 8.4 LU) | 6 (Ø 11.7 LU) |
| -1.1LU (Audio exceeds HR) | -2.1LU (Audio exceeds HR) | -0.9LU (Audio exceeds HR) | -1.3LU (Audio exceeds HR) |
| 9 | 10 | 8 | 8 |
| 6 (warm, compressed, dull) | 8 (warm, authentic or static) | 7 (warm, dull, static) | 8 (lively'n' nice to static'n'dull) |
| 9 | 9 | 9 | 9 |
| 10 | 10 | 10 | 5 (Editing exclusive) |
| 6 (Recording) | 6 (Education) | 8 (Recording, Software) | 0 (No compl. Services) |
| 196/ 250 | 186/ 250 | 184/ 250 | 180/ 250 |
| 78% | 74% | 74% | 72% |
| 3.2 | Misleading Price, no Result | 3.6 | 5.5 |

7

Konbeatz

"From": Misleading Price
 From € 89
 Konbeatz.de

This *online audio mixing and mastering studio* focuses on boomy Rap productions with partly masked lead vocals. Besides, we have found natural and very good Acoustic demos that are just a bit too thin. The tested demos opt for loudness and disregard the broadcast standard EBU R 128. The demos are not too loud but clipping. All in all: good sound from a good studio. Unrated: We do not like misleading prices.

8

Audio Mixing Mastering

Transparent Business
 € 125 FIX
 www.AudioMixingMastering.com

This *online audio mixing and mastering studio* is focused on Mainstream Electro Pop and crafts great sound for an incredible price/quality ratio. Thus, AMM is our price/quality winner. The tested AMM demos opt for extreme loudness and disregard the merits of the broadcast standard EBU R 128. We cannot tolerate clipping. A heavily restricted dynamic range leads to a static sound. Still: This studio is the right choice for EDM & Co.

9

Milian Mastering

Intransparent Business
 No Prices for Mixing
 www.MilianMastering.de

This *online audio mixing and mastering studio* crafts good sound and is very versatile. On the website are no demos. Surprisingly, the tested productions are not just clipping but the loudest (worst) in the test field. A heavily restricted dynamic range leads to static and dull sound. The tested productions disregard the merits of the broadcast standard EBU R 128. This studio is nonetheless worth visiting. Unrated: Missing mixing prices.

10

Online Mixing

Intransparent Business
 No Prices
 www.Online-Mixing.de

This *online audio mixing and mastering studio* has the biggest mastering room in Europe (300m²). There are no demos on the website. This studio crafts an overall professional sound. Surprisingly, the tested productions opt for loudness and disregard the broadcast standard EBU R 128. The clipping is the worst in the test field. Thus, we have even subtracted points. Nonetheless: This studio is worth visiting. Unrated: The prices are missing.

| 10 (Direct Links to Artists) | 10 (7+ Demos) | 0 (No Demos. Searched.) | 0 (No Demos. Searched.) |
|------------------------------------|----------------------------|----------------------------------|------------------------------|
| 10 (Results only) | 6 (Unmixed vs. Mixed) | 0 (due to no demos) | 0 (due to no demos) |
| 6.5; 7; 9 | 9; 9; 10 | 10; 10; 10 | 9; 8; 10 |
| 9; 10 | 10; 10 | 10; 9 | 10; 10 |
| 6 (too boomy or too thin) | 9 | 9 | 10 |
| 8; 7.5 | 9; 10 | 10; 10 | 10; 10 |
| 6.5 | 5 (poor Dynamics) | 4 (very poor Dynamics) | 4 (very poor Dynamics) |
| 6 | 10 | 10 | 9 |
| 8 | 10 | 10 | 10 |
| 9 | 7 | 6 (a lot of compression) | 7 |
| 10 (Ø 11 LU) | 5 (Ø 2.6 LU) | 5 (Ø 2.6 LU) | 10 (6 LU) |
| 10 (Loudest: -9 LUFS) | 6 (Loudest: -7.3 LUFS) | 5 (Loudest: -6.8 LUFS) | 8 (Loudest: -8.1 LUFS) |
| 0 (Loudest: +1 LUFS) | 0 (Loudest: +1.7 LUFS) | 0 (Loudest: +1.9 LUFS) | -5 (Loudest: +2.7 LUFS) |
| 0 (TP Limiter cuts 2 LU) | 0 (TP Limiter cuts 2.7 LU) | 0 (TP Limiter cuts 2.9 LU) | -5 (TP Limiter cuts 3.7 LU) |
| 4 (Ø 9.7 LU) | 3 (Ø 8.2 LU) | 3 (Ø 7 LU) | 3 (7.1 LU) |
| 6 (Ø 11 LU) | 5 (Ø 10.2 LU) | 5 (Ø 9.3 LU) | 5 (10.8 LU) |
| -1.3LU (Audio exceeds HR) | -2LU (Audio exceeds HR) | -2.3LU (Audio exceeds HR) | -3.7LU (Audio exceeds HR) |
| 8 | 9 | 10 | 9 |
| 7 (static, either boomy or thin) | 7 (warm, static, dull) | 8 (warm'n'nice to static'n'dull) | 8 (warm, a bit boomy) |
| 7 (electronic Focus) | 5 (heavy electronic Focus) | 9 | 7 |
| 5 (unclear) | 10 | 5 (DDP etc. exclusive) | 5 (unclear) |
| 6 (Recording) | 0 (no compl. Services) | 0 (no compl. Services) | 0 (no compl. Services) |
| 176/ 250 | 174/ 250 | 158/ 250 | 152/ 250 |
| 70% | 70% | 63% | 61% |
| Misleading Price, no Result | 0.7 | No Prices, no Results | No Prices, no Results |

EXPLANATORY NOTES

TEST - BEST ONLINE AUDIO MIXING AND MASTERING STUDIOS IN EUROPE 2018

Demos on Website: Companies that offer demos or direct links to demos receive 10 points. Those without demos 0 points.

Misleading Demos: Companies that present results receive 10 points. Companies that try to trick potential clients with "before and after" comparisons (soft versus loud or unmixed versus mixed) receive 6 points. Studios without demos receive 0 points.

Depth: How deep is the sound stage? Can one distinguish front and rear elements on the sound stage? Or are all instruments "in your face"? In some genres rear positions are hardly used. We have not subtracted points for consensual, genre-specific flatness in regard to the depth.

Wideness: Is the track mono (ok) or stereo? In case it is stereo: Has the wideness of the sound stage been reasonably used? Or is the stereo image quite poor?

Room & Ambience: How have reverb effects and delay been used? Is the reverb amount realistic? Are room resonance and room sound appropriate? Is the ambience convincing?

Stereo Balance: Are the right and the left side of the stereo image well-balanced? Or is one side overly dominant?

Mono Compability: Is the audio image intact when played back in mono? This is important for broadcast stations and airplay.

Frequency Response: Is the frequency response balanced? Are there troublesome peaks or attenuations?

Equing and editing of Vocals and Instruments: How have vocals and instruments been shaped? How do they sound? Have the engineers worked out the very characteristics?

Dynamic Range (Instruments): Has the dynamic range of instruments been preserved? Or has the dynamic range been diminished? Electronic samples have, for example, often no dynamic range (0LU).

Relative Level Balance of all Elements: Are all elements well-balanced? Or are some elements too loud or too soft in regard to the rest of the mix? Solo instruments or bass instruments are, for example, often a bit too loud.

Plausibility of the Sound Stage: Does the position of elements on the sound stage make sense? For example: A dry drumset right in your face and a guitar way beyond that is drown in reverb make no sense.

Compression (whole Song): Is the material heavily or well-compressed?

Intrinsic Loudness and perceived Loudness on Radio: Before material is aired all audio files are levelled. After levelling, the *intrinsic loudness* and the sound quality make the difference on the air.

Analog-Electronic-Ratio: We decided to favour studios that primarily edit analog source material (6-10 points). Why? Because electronic source material is pre-produced. Electronic samples are in most cases ready-to-use samples that are already mixed. Thus, engineers that focus on electronic productions have to put less time on mixing and mastering. Moreover, less knowledge is needed: They do not have to cope with sound characteristics, room acoustics, microphone types or the complex field of mixing.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| Dynamic Range (LU) | <1 | 1 | 1.5 | 2 | 2.5 | 3 | 3.5 | 4 | 4.5 | > 5 |
| IL (- LUFS) | 4.5-5.0 | 5.0-5.5 | 5.5-6.0 | 6.0-6.5 | 6.5-7.0 | 7.0-7.5 | 7.5-8.0 | 8.0-8.5 | 8.5-9.0 | > 9.0 |
| HR (LU) | 3-4 | 5-6 | 7-8 | 9-10 | 11-12 | 13-14 | 15-16 | 17-18 | 19-20 | 21-22 |
| Crest (LU) | 1-3 | 3-5 | 5-7 | 7-9 | 9-11 | 11-13 | 13-15 | 15-17 | 17-19 | 19-22 |

EBU R 128: The European Broadcast Recommendation wants to end the loudness war in favor of the sound quality. For decades, a lot of engineers shared the misbelief that loudness is the ultimate goal in crafting music. In order to boost the loudness of audio material, natural dynamics have been eliminated - in most cases at the expense of the sound quality. Loudness Warriors ignore that dynamic range is an important way of musical expression. **EBU R 128** wants to bring back dynamics into modern audio productions - at the expense of realising that loudness is just a secondary characteristic that can easily be relativated by using the volume knob. Productions that are in line with **EBU R 128** have an average level of -23 LUFS and can, thus, use a headroom of 22LU. In accordance with **EBU R 128**, our test follows the revived and modern attitude: The more dynamic range (within reasonable borders) the better. And: The less editing at the expense of the sound quality the better. These basic principles led to the table above.

We always write, research and analyse in a careful way. We only write things that have been proven true. But we are human beings that can make mistakes. In case you have any questions or in case you have found a mistake: Do not hesitate to contact us. Contact@MusicToday.eu.

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