

## SPECIFIC FEATURES OF THE FIELD OF TELEVISION SOUND DIRECTION (PROBLEMS AND SOLUTIONS)

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**Abstract:** *This popular science article provides a comprehensive analysis of the specific professional characteristics, artistic and technical aspects of the sound director field in the modern television system. The article examines the main problems observed in the field in 2025–2026, including digital noise, imperfection of the acoustic environment, and technological disruptions in personnel training. At the same time, the importance of integrating artificial intelligence algorithms, IP-based sound transmission systems, and Spatial Audio technologies as solutions to the problems is described in a holistic text. The study is intended for media professionals, sound directors, and students of telecommunications.*

**Keywords:** *Television, emotional intelligence, national identity, artificial intelligence, voice, director.*

## ОСОБЕННОСТИ ОБЛАСТИ ТЕЛЕВИЗИОННОЙ ЗВУКОРЕЖИССУРЫ (ПРОБЛЕМЫ И РЕШЕНИЯ)

**Аннотация:** *В данной научно-популярной статье проводится всесторонний анализ специфических профессиональных характеристик, художественных и технических аспектов деятельности звукорежиссёра в современной телевизионной системе. В статье рассматриваются основные проблемы, наблюдаемые в отрасли в 2025–2026 годах, включая цифровой шум, несовершенство акустической среды и технологические сбои в подготовке кадров. В то же время в целостном изложении раскрывается значение интеграции алгоритмов искусственного интеллекта, IP-ориентированных систем передачи звука и технологий пространственного аудио в качестве решений существующих проблем. Исследование предназначено для специалистов медиаиндустрии, звукорежиссёров и студентов в области телекоммуникаций.*

**Ключевые слова:** *телевидение, эмоциональный интеллект, национальная идентичность, искусственный интеллект, голос, режиссёр.*

## TELEVIZION OVOZ REJISSYORLIGINING O'ZIGA XOS XUSUSIYATLARI (MUAMMOLAR VA YECHIMLAR)

**Annotatsiya:** *Ushbu ilmiy maqolada zamonaviy media tizimida televizion ovoz rejissyorligining o'ziga xos kasbiy xususiyatlari, shuningdek uning badiiy va texnik jihatlari*

*har tomonlama tahlil qilinadi. Tadqiqotda 2025–2026 yillarda ushbu sohada kuzatilayotgan asosiy muammolar, jumladan, raqamli shovqinlar, akustik muhitdagi kamchiliklar hamda professional tayyorgarlikdagi texnologik bo'shliqlar ko'rib chiqiladi. Shu bilan birga, mazkur muammolarni bartaraf etishda sun'iy intellekt algoritmlarini joriy etish, IP asosidagi audio uzatish tizimlari hamda Spatial Audio texnologiyalaridan foydalanishning ahamiyati kompleks tarzda yoritiladi. Tadqiqot media mutaxassislari, ovoz rejissyorlari hamda telekommunikatsiya sohasi talabalari uchun mo'ljallangan.*

**Kalit so'zlar:** *televizion tizim, emotsional intellekt, milliy identitet, sun'iy intellekt, ovoz, rejissura.*

## INTRODUCTION

Television sound design in the modern media space is not only a technical process, but also a complex art form and a high-tech field that directly affects the emotions of the viewer. The specific features of this field are primarily manifested in ensuring the unity of image and sound, maintaining acoustic balance during the broadcast process, and creating multi-layered sound compositions. In television, the sound designer must simultaneously combine speech, music, natural sounds (intershum) and special effects in a logical sequence. Especially in live broadcast processes, the sound designer is required to make decisions within seconds and a high level of attention.

## LITERATURE REVIEW AND METHODS

By 2025–2026, the widespread introduction of Dolby Atmos and spatial sound technologies in the industry will begin to give the viewer a sense of being in the center of events, which requires sound directors not only creative taste, but also complex mathematical and physical knowledge. However, there are a number of problems in the industry, the first of which is related to the acoustic condition of studios and outdated technical infrastructure. On many TV channels, sound recording and transmission systems do not correspond to modern 4K and 8K image quality, which reduces the overall quality of content. The second important problem is the technological gap in the personnel training system. Working with modern IP-based (AVoIP) sound systems also requires IT engineering skills from the sound director, but current training programs have not yet fully adapted to this level. Also, problems such as technical interruptions and latency that occur during digital broadcasting

remain relevant. As a solution to these problems, it is proposed to actively integrate artificial intelligence (AI) technologies into sound design. Artificial intelligence allows you to clean up excess noise, clarify speech, and automatically adjust the balance of music in real time. For example, AI-based compressors and equalizers minimize errors associated with the human factor during broadcasting. Another solution is to abandon traditional analog and digital cables and completely switch to IP protocols such as Dante or AES67. This system significantly simplifies the transmission and control of sound over long distances without losing quality. If we dwell on the artistic features of sound design in television, here sound is not only a means of transmitting information, but also a means of psychological influence. It is precisely thanks to the skill of the sound designer that tense situations or dramatic moments in talk shows reach the viewer.

## RESULTS AND DISCUSSION

To eliminate the problems, it is necessary to install modern monitoring systems on TV channels and improve the skills of specialists based on international standards. Also, reviewing the acoustic design of studios and using new generation sound-absorbing materials will help to improve quality. Technologies for cloning voice and converting text to speech using artificial intelligence are opening up new opportunities in the field of dubbing and sign language interpretation. This requires the sound director not only to work at the remote control, but also to manage complex algorithms. The future of the industry is associated with cloud technologies, and now the sound director has the opportunity to control the broadcast remotely. This increases speed and saves resources. In the training of specialists, it is necessary to combine theory and practice, and train students to work with modern DAW (Digital Audio Workstation) programs and plug-ins. In sound direction, the "problem and solution" chain is in constant motion, and each new technology creates a new problem and a corresponding solution. The most important factor that determines the success of a broadcast, which is imperceptible to the viewer, is the professional purity and beauty of the sound. There is also a problem of dynamic range management (Loudness management) in the sound mode of television, which means regulating the difference in volume between advertising and the main program. The full

implementation of the international EBU R128 standard can put an end to this problem. The creative potential of a sound director should not be limited to his technical knowledge. He should feel the soul of each frame and create a new world through sounds. In the future, the symbiosis of artificial intelligence and human creativity will undoubtedly bring television sound direction to the highest peak of art. We must not only be observers in this process, but also active participants and raise the sound quality of our national media products to world standards. A professional sound director is a combination of a technical engineer and an artist with a refined taste.

Each successful solution in his work serves as a spiritual recreation for millions of viewers. The field of television sound design is constantly developing, and this development testifies to the limitlessness of human thought. Each new project requires a new approach and a new acoustic solution from the sound designer. By further improving this area, we will bring Uzbek television journalism and cinema to a new level. Sound is an invisible force through which we see the world in different colors. The problems of the industry and their scientifically based solutions lead us to greater perfection. Today, it is an urgent task to study international experience in sound design and adapt it to local conditions. The next generation of sound designers must love both technology and art equally.

## CONCLUSION

The field of television sound design has been formed as a high-tech and creative field by 2026. The implementation of artificial intelligence, IP technologies and modern acoustic solutions is a vital necessity to eliminate technical and personnel problems in the field. The role of the sound designer will increase not only in technical adjustment, but also in creating the emotional language of the artistic product. By systematically approaching problems and applying innovative solutions, we will not only improve the quality of national television, but also achieve the creation of competitive content in the international media market.

## FOYDALANILGAN ADABIYOTLAR

1. ДИНОВ.В.Г. *Звуковая картина. Записки о звукорежиссуре. Санкт-Петербург. 2012г.*

2. ХМЫРОВ А.В. САДЫКОВА Н.И. *Звуковая партитура. Учебное пособие Ташкент 2022г.*
3. БЛИНОВ В. А. – Цифровая звукозапись. Санкт-Петербург: Питер, 2005
4. ГАФУРОВА Ш.А. *Компьютерные музыкальные технологии т.2007*
5. MIRSAIDOVA D. I. et al. Features and originality of the development of the art of dubbling in uzbek cinema //Oriental Art and Culture. – 2024. – Т. 5. – №. 2. – С. 575-580.
6. IZHAK, B. – Sound Engineering Explained. Routledge, 2019.
7. KATZ, B. – Mastering Audio: The Art and the Science. Focal Press, 2015.
8. АКВАРЖОН МИРЗАЙЕВ –Ovoz yozish studiyasi jihozlari va ovoz yozish tizimi (o'quv qo'llanma) T.2020.
9. ХЮБНЕР М. – *Звукозапись: Руководство. Москва: ДМК Press, 2012.*
10. МИРСАЙДОВА Д.И. и др. ГОЛОСА ТРАДИЦИИ: КАК ДУБЛИРОВАНИЕ СФОРМИРОВАЛО УСПЕХ УЗБЕКСКОГО КИНО В СОВЕТСКУЮ ЭПОХУ //Искусство и культура Востока. – 2024. – Т. 5. – №. 6. – С. 339-342.
11. JAY ROSE. The Producing Great Sound for Film and Video: Expert Tips from Preproduction to Final Mix.Taylor& Francis Ltd.Abingdon,UnitedKingdom,2014