

# EUROPASS DIPLOMA SUPPLEMENT

## TITLE OF THE DIPLOMA (ES)

*Técnico Superior en Sonido para audiovisuales y espectáculos*

## TRANSLATED TITLE OF THE DIPLOMA (EN)<sup>(1)</sup>

*Higher Technician in Sound for Audiovisual Productions and Shows*

---

(1) This translation has no legal status.

## DIPLOMA DESCRIPTION

**The holder of this diploma will have acquired the General Competence with regard to:**

Defining, planning and supervising the installation, pickup, recording, control, broadcast, postproduction and reproduction of sound in audiovisual, radio, music industry, shows, events and fixed installations of sound, ensuring and controlling the technical and formal quality.

**Within this framework, the PROFESSIONAL MODULES and their respective LEARNING OUTCOMES acquired by the holder are listed below:**

### “Planning of Sound Projects”

The holder:

- Defines the technical, artistic and communicative requirements necessary for the implementation of a sound project, relating technical and organizational needs to fulfil the objectives of the project.
- Prepares site plans of the technical equipment in the development area of the project, analyzing acoustic, organizational and structural requirements.
- Determines the human and material needs for the project implementation, relating its operation and functionality to the achievement of the project objectives.
- Performs block diagrams of sound equipment and its connection to the power supply, analyzing the specific needs of sound projects, according to their type (radio, audiovisual, sound of fenced enclosures and shows).
- Makes temporary planning of actions that the sound equipment must perform at each stage of the production to achieve it in the time and manner specified in the project, relating each of the actions to the necessary technical and human resources and the budget.

### “Sound Installations”

The holder:

- Performs the pre-installation of sound equipment and accessories in audiovisual and entertainment projects, assessing the technical features and their functions according to the installation project.
- Optimizes the sound localization to adapt in to the capture and reproduction needs of the sound system, evaluating the acoustic characteristics of the site and the type of project or audiovisual show.
- Supervises the assembly, disassembly and positioning of sound equipment and materials, interpreting the installation drawings and wiring diagrams and applying the security measures when executing the work.
- Makes the connection of the equipment constituting a sound system, evaluating its accordance with the applicable rules and to the quality requirements and applying the appropriate techniques to the project.
- Checks the operation of the sound system, configuring the hardware and software equipment and the documentation justifying the commissioning and operation.
- Determines the processes of preventive and corrective maintenance of the equipment and sound systems, applying troubleshooting protocols and maintenance techniques as well as the storage management of equipments.
- Complies with the rules on labour risk prevention and environmental protection, identifying the associated risks, the equipment and the measures to prevent them.

### “Sound for Audiovisual Productions”

The holder:

- Configures the radio equipment in sound installations, ensuring a correct transmission between sending and receiving equipment.
- Makes the preparation of sound recording on the filming, recording or radio set, selecting the microphone techniques according to the objectives of the project and the development of the production.
- Verifies and optimizes the intelligibility of the audio signal during the audiovisual or radio production, analyzing the characteristics and functions of intercom systems and audio monitoring and applying the most appropriate technical adjustments to the type of project or program.
- Makes uptake and mixture of radio and television programs, creating, where appropriate, premixes and scenes, adjusting levels, equalizations and dynamics pans, amongst other parameters, in accordance with the objectives of production.

- Performs the sound recording in audiovisual productions, adapting the technical and artistic resources available to the needs of the production.

### **“Control of Live Sound”**

The holder:

- Adjusts the FOH (front of house) mixer and the signal processors, adapting the settings according to the type of application and project performance.
- Sets the sendings to screens and their response, ensuring a uniform coverage concerning pressure and frequency, and feedback-free listening, attending to what it is reflected in the technical rider as well as the requests from musicians and the artistic team during rehearsals.
- Sets the microphone and in ear tracks, supervising their placement in order to take care of the aesthetic and operational aspects and conforming systems of reception/ transmission to achieve an optimal technical results.
- Makes mixing and audio processing during the development of a live show or event, respecting its goals and responding to contingencies that may arise.
- Evaluates the technical contribution to the expected artistic result of sound configuration, the operation of sound equipment and the stylistic balance of the mixture, producing reports that reflect the results.

### **“Studio Recording”**

The holder:

- Performs the sound capture in the recording studio, selecting the equipment and applying the most appropriate capture techniques, according to the technical and artistic project.
- Makes multitrack sound recording in studio, relating the communication needs of the project to the available resources.
- Makes the connection and device configuration, the edition of events and synchronization related to MIDI environment, applying MIDI protocol specifications.
- Adjusts the monitor and intercom systems in the study, allowing an adequate listening by the cast and crew of the production.
- Adapts the sound characteristics of the signals received to the technical and expressive needs of the production, by mixing, processing and editing, taking into account the expressive codes of sound and musical language.

### **“Adjustments of Sound Systems”**

The holder:

- Performs the adaptation of a sound design to an enclosed space, relating the information extracted from the project documentation to the application of system optimization techniques.
- Performs the adjustment of sound subsystems, analyzing project documentation and applying adjustment techniques to audio signal.
- Evaluates the response of the sound system in the enclosed space, deciding and justifying the choice of one or another system of analysis and the measurement procedure, to ensure the right adjusting of the system.
- Adjusts the sound system's response to the constraints of limited space, applying optimization techniques for sound systems.
- Checks the start-up performance of a sound fixed installation, evaluating the behaviour of the system and documenting the project delivery.

### **“Sound Postproduction”**

The holder:

- Configures digital editing sound equipment, relating the technical characteristics of the publishing platforms and equipment to the distinctive features of the assembly project.
- Adapts the features and the quality of sound bites from music libraries and libraries of effects, according to the characteristics of the different types of sound projects.
- Edits the soundtrack of audiovisual products (film, video, television and multimedia), applying edition techniques and evaluating the correspondence between the project objectives and the results.
- Performs the edition of radio projects and/or records, synchronizing the sources and the necessary external elements and taking into account the characteristics of standards and protocols.
- Performs the final mix of the soundtrack from the editing process, creating premixes, adjusting levels, EQs, dynamic pans and according to the needs of each part of the project.

### **“Electroacoustics”**

The holder:

- Configures distribution systems and the protective elements of electrical installations of sound systems, interpreting diagrams and applying basic techniques of connection and measurement.
- Controls the audio quality through the use of measuring and hearing instruments, as they pass through different electronic processing stages or equipment, relating the equipment used to the changes experienced by the signal.
- Evaluates the performance of sound broadcasting equipment, justifying it according to the characteristics of the combined response of the electro-acoustic transducer signal (engine) and the types of speakers (acoustic enclosures).

- Assembles wires for the interconnection of analogue or digital audio equipment, justifying the selection of wires and connectors depending on the application.
- Assembles a digital network, selecting the most appropriate protocol for the transport of audio signals and control equipment, and other necessary auxiliary equipment such as system requirements or installation.

### **“Sound Communication and Expression”**

The holder:

- Designs the musical and sound background of a sound, audiovisual or show, analyzing the employability and interrelation possibilities of the different expressive media involved.
- Performs a skilled hearing and considers the completion of a professional speech, analyzing the expressive and communicative characteristics of the typical elements of musical language and relating them to their application in audio, audiovisual and entertainment sound projects.
- Designs the soundtrack of a sound and audiovisual products and shows, applying the expressive resources of sound language and combining their articulation and combination possibilities.
- Performs localization and file processes of sound documents according to the characteristics of each media, identifying and managing accurate databases.
- Performs sound technical scripts, combining the use of communicative resources of sound language with the application of narrative techniques to ensure the achievement of project objectives.

### **“Project on Sound for Audiovisual Productions and Shows”**

The holder:

- Identifies the needs of the production sector, relating them to the standard projects that may satisfy them.
- Designs projects related to the competences described in the diploma, including and developing their constituting stages.
- Plans the project implementation, determining the intervention plan and the associated documentation.
- Defines the procedures for the monitoring and the control of the project implementation, justifying the selection of the variables and instruments used.

### **“Professional Training and Guidance”**

The holder:

- Selects job opportunities, identifying the different possibilities of labour integration, and the alternatives of lifelong learning.
- Applies teamwork strategies, assessing their effectiveness and efficiency on the achievement of the company's goals.
- Exercises rights and complies with the duties derived from labour relationships, recognising them in the different job contracts.
- Determines the protective action of the Spanish Health Service in view of the different covered eventualities, identifying the different types of assistance.
- Assesses the risks derived from his/her activity, analysing the job conditions and risk factors present in his/her labour setting.
- Participates in the development of a risk prevention plan in a small enterprise, identifying the responsibilities of all agents involved.
- Applies protection and prevention measures, analysing the risk situations in the labour setting of the Higher Technician in Sound for audiovisual productions and shows.

### **“Business and Entrepreneurial Initiative”**

The holder:

- Recognizes the skills related to entrepreneurial initiative, analysing the requirements derived from job positions and business activities.
- Defines the opportunity of creating a small enterprise, assessing the impact on the performance setting and incorporating ethic values.
- Carries out the activities for the setting-up and implementation of a company, choosing its legal structure and identifying the associated legal obligations.
- Carries out basic administrative and financial management activities of an SME, identifying the main accounting and tax obligations and filling in documentation.

### **“On the Job Training”**

The holder:

- Identifies the structure and organization of the company, relating them to the type of service provided.
- Applies ethical and work habits in the development of his/her profession, according to the characteristics of the job and the procedures established by the company.
- Participates in the planning of sound projects, analyzing their requirements and providing technical solutions to meet the predetermined objectives in their documentation.
- Participates in operations of capture, monitoring and recording sound projects for radio and audiovisual productions, relating the techniques and the equipment used with intermediate and final results required.

- Participates in the edition, installation, adjustment and audio reproduction in entertainment projects or events, relating the techniques and equipment used in the intermediate and final results required.
- Performs the final mix of the soundtrack from the editing process, creating premixes and adjusting levels, EQs, dynamic pans, amongst other parameters, according to the needs of each part of the project.

### **RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE DIPLOMA**

The Higher Technician in Sound for audiovisual productions and shows works in the audiovisual and radio sector, recording companies, shows, events and installation of fixed structures and ephemeral sound in fenced enclosures.

The most relevant occupations or jobs are the following:

- Sound director in films, audiovisual productions and shows.
- Sound technician in cinema and audiovisual productions.
- Direct sound technician.
- Sound technician in recording studio.
- Technician in musical recording.
- Sound technician for PA (public address).
- Technician in sound monitors.
- Technician in sound systems.
- Sound technician in wireless systems.
- Technician in microphone systems.
- Sound specialist.
- Sound editor.
- Mixer and sound masterer.

### **AWARD, ACCREDITATION AND LEVEL OF THE DIPLOMA**

**Name of the body awarding the diploma on behalf of the King of Spain:** Spanish Ministry of Education or the different Autonomous Communities according to their areas of competence. The title has academic and professional validity throughout Spain.

**Official duration of the education/ training leading to the diploma:** 2000 hours.

**Level of the diploma (national or international)**

- NATIONAL: Non-University Higher Education
- INTERNATIONAL:
  - Level 5 of the International Standard Classification of Education (ISCED5).
  - Level 5 of the European Qualifications Framework (EQF5).

**Entry requirements:** Holding the Certificate in Post-Compulsory Secondary Education (Bachillerato) or holding the corresponding access test.

**Access to next level of education/training:** This diploma provides access to university studies.

**Legal basis:** Basic regulation according to which the diploma is established:

- Minimum teaching requirements established by the State: Royal Decree 1682/2011, of 18 November, according to which the diploma of Higher Technician in Sound for audiovisual productions and shows and its corresponding minimum teaching requirements are established.

**Explanatory note:** This document is designed to provide additional information about the specified diploma and does not have any legal status in itself.

**COURSE STRUCTURE OF THE OFFICIALLY RECOGNISED DIPLOMA**

<b>PROFESSIONAL MODULES IN THE DIPLOMA ROYAL DECREE</b>	<b>CREDITS ECTS</b>
<b>Planning of Sound Projects</b>	7
<b>Sound Installations</b>	13
<b>Sound for Audiovisual Productions</b>	16
<b>Control of Live Sound</b>	9
<b>Studio Recording</b>	9
<b>Adjustments of Sound Systems</b>	5
<b>Sound Postproduction</b>	9
<b>Electroacoustics</b>	7
<b>Sound Communication and Expression</b>	9
<b>Project on Sound for Audiovisual Productions and Shows</b>	5
<b>Professional Training and Guidance</b>	5
<b>Business and Entrepreneurial Initiative</b>	4
<b>On the Job Training</b>	22
	TOTAL CREDITS
	<b>120</b>
<b>OFFICIAL DURATION (HOURS)</b>	<b>2000</b>

\* The minimum teaching requirements shown in the table above comprise 55% official credit points valid throughout Spain. The remaining 45% corresponds to each Autonomous Community and can be described in the **Annex I** of this supplement.

## INFORMATION ON THE EDUCATION SYSTEM

