

Profession: TECHNICAL STAGE MANAGER

Specialties: lighting, stage, sound, video-image

1 – Alternate titles and related professions

Specialized titles: Lighting supervisor, Stage supervisor, Sound supervisor, Video-image supervisor

Alternate titles: /

Related professions: Stage manager, Head carpenter, Venue manager, Head electrician, Orchestra manager, Rehearsals manager, Ballet manager

2 – Functions and activities of the profession

Missions

Within his/her specialty, the technical stage manager undertakes the operation and running of events and shows. He/she manages and coordinates the human and technical resources at his/her disposal.

Activities

Within his/her specialty, he/she:

- Prepares and organizes the required technical and logistical means for the production and operation of shows and events, within the framework of the organization's artistic and cultural projects;
- Designs and adapts the layout plan for stage equipment;
- Performs and directs the get-in/set-up, adjustments, and get-out/take-down of machinery and equipment;
- designs and carries out technical effects in response to artistic requests;
- Oversees/operates the technical consoles and technical operation during shows and events;
- Participates in creating proper conditions of audience reception and comfort;
- Manages personnel placed under his/her responsibility;
- Ensures proper reception and working conditions for the artistic and technical teams;
- Organizes and participates in the stowing and storing of machinery and equipment;
- Manages and participates in the everyday upkeep and maintenance of machinery and stage equipment;
- Surveys the technological modifications and aging of stage equipment and machinery;
- Implements health & safety rules and risk prevention measures relating to professionals and general public.

3 –Responsibilities

Within his/her specialty, he/she is responsible for:

- The proper technical running of the performance, show or event;
- Following the rules of the art and ensuring the proper working order of machinery and equipment;
- Adhering to the production and running schedule within the confines of work regulations;
- Adhering to health & safety rules and risk prevention measures applicable to professionals and general public.

4 -Skills

The profession of technical stage manager requires a general artistic and dramaturgical culture as well as scientific and technical knowledge relating to each specialty.

- *Lighting specialty*: knowledge of imagery, optics, colorimetry, photometry, electricity, electronics, networks...
- *Stage specialties*: knowledge of stagecraft, mechanics, machinery, electro-technical equipment, electro-mechanics, construction, electricity, electronics, networks...
- *Sound specialty*: knowledge of music and sound, acoustics, signal treatment, electricity, electronics, networks...
- *Video-image specialty*: knowledge of imagery, optics, image treatment, electricity, electronics, networks...

Engineering and steering

Specific skills:

Understanding artistic requests

Within his/her specialty:

Mobilizing technical knowledge and know-how;

Analyzing technical riders and evaluating project feasibility, in conjunction with the artistic and technical teams;

Proposing options and/or implementing necessary technical adaptations to suit existing constraints, and within allocated resources;

Writing the technical rider for a touring show or event;

Proposing purchases, rentals, refurbishments, or adaptations of technical equipment;

Proposing improvements to functionality.

Cross-sector skills

Running projects, operations or works	Site organization and operation Planning and coordinating on-site activities of external companies; Organizing on-site meetings; Overseeing the application of standards and implementation techniques; Overseeing the execution of works and their compliance to rules of the art and health & safety; Inspecting the completion and compliance of work performed.
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Organization and management

Specific skills:

Within his/her specialty:

Updating and overseeing adherence to the technical rider and get-in/set-up plans for shows and events;

Identifying characteristics and specific constraints of venues for shows and events;

Researching and proposing technical solutions addressing artistic requests;

Anticipating potential logistical problems;

Organizing and managing the work of technicians placed under his/her responsibility;

Acting in conjunction with technical stage managers and technicians not under his/her responsibility;

Circulating necessary documents and guidelines to working technical teams (schedule, plans, crew contact lists, etc.)

Looking after outside contractors to the organization or establishment, from arrival to departure;

Determining resources to be put into action, addressing operational needs, selecting them and making them available;

Determining deployment of equipment taking into account constraints, needs, and equipment required elsewhere;

Tracking and adjusting deployment of equipment on the layout plan, while adhering to standards, symbols and scales;

Writing and recording the cue sheets for the running of the show or event and circulating them;

Establishing technical systems overview charts;
 Organizing changes to set or stage;
 Managing and undertaking transportation of equipment;
 Taking delivery of rented or purchased equipment, and making returns;
 Organizing and carrying out stowing and storage of equipment.

Cross-sector skills:

Organization – Management	Team management Leading, following, and overseeing department activities; Delegating responsibility; Harmonizing working methods between departments; Moderating department meetings; Mediating and settling conflicts; Organizing circulation of information within the department; Participating in defining functional requirements of software applications and overseeing performance of tests and entry into service.
	Activity reports Organizing tasks according to action plan; Proposing improvements in order to provide better service; Accounting for completed work and results and conditions of action.
Upkeep – Maintenance	Management of supplies and stocks Conducting inventory of equipment, products and disposing of outdated products; Applying storage rules for equipment and products; Updating documentation tracking consumables and quantifying needs for equipment and products; Placing orders for supply; Taking delivery and inspecting the condition and quality of incoming equipment and products.

Operation

Within his/her specialty:

Directing, running, and verifying the get-in/set-up and get-out/take-down, hanging lights, wiring, providing power supply to electrical and electronic equipment whether fixed or mobile, on the ground or elevated, and installing protective measures and indicators;
 Installing, connecting and operating the specific networks required;
 Installing and operating equipment and machinery in the consoles (light board, desks, command & communication interfaces, etc);
 Driving mobile elevated work platforms (MEWP's) and using hoisting machinery;
 Adjusting settings on equipment and machinery in accordance with artistic requests;
 Operating machinery and equipment;
 Programming and executing technical effects according to artistic requests;
 Revising the cue sheet(s) and adapting to any changes;
 Addressing and resolving technical problems affecting the proper running of the operation;
 Supervising the tidying and cleaning of stage area before and after performances;
 Making and controlling presets of the show;
 Supervising and making changes to set or stage.

Cross-sector skills

Upkeep– Maintenance	Undertaking operations of upkeep and maintenance Applying a protocol for upkeep and maintenance; Using correct standards and operating techniques when using products and equipment; Verifying maintenance levels when cleaning a venue or piece of equipment or machinery; Running diagnostics and alerting to high level malfunctions; Storing equipment and products after use; Collecting, sorting, and disposing of waste; Filling forms relating to use or maintenance of machinery or equipment.
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Administration

Specific skills:

Within his/her specialty:

Establishing procedural forms for technical equipment management;

Compiling and developing a contact list for specialized service providers and suppliers.

Cross-sector skills

Administrative management	Examining files and applying procedures Writing and sending administrative documents; Filling out follow-up forms; Gathering, classifying, and archiving documents.
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Human resources

Specific skills:

Within his/her specialty:

Involving teams in health & safety issues and issues of risk prevention and hardship in the workplace;

Facilitating collaboration between different teams working on a show or event.

Cross-sector skills

Human resources management	Participating in human resource management: Participating in job description definition; Participating in recruitment procedures; Greeting and following the activities of a new employee for integration or apprenticeship purposes; Taking note of requests and needs for employee/contractor skills and training; Managing personnel work schedules, holidays, and absences; Evaluating employees/contractors.
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Budget

Specific skills:

Within his/her specialty:

Making a case for the need to purchase particular equipment, consumables or services;

Tracking the execution of the budget;

Verifying compliance of services and validating services completed.

Health & Safety and risk prevention

Specific skills:

Within his/her specialty:

Verifying compliance and proper use of stage machinery and equipment;

Identifying and evaluating safety risks and alerting superiors in the hierarchy;

Proposing and implementing countermeasures to general safety rules in order to respond to specific operational constraints;

Implementing safety procedures for users, in application of regulations;

Participating in risk prevention relating to physical activity.

Cross-sector skills:

Safety in the workplace	Overseeing health & safety rules in the workplace Alerting to malfunctions and rule infringements; Putting in place countermeasures for individual and collective protection; Supervising training and qualification of operators/contractors to use equipment and machinery; Keeping abreast of changes in regulations.
	Application of health & safety rules in the workplace Learning and adhering to rules and guidelines; Making sure tools and equipment are in proper working order; Using individual and collective protective equipment; Alerting others and protecting one's own actions through the appropriate means; Storing, handling, and safely disposing of products and waste.

5 - Place in the company's organizational chart

The technical stage manager is part of the technical chain.

He/she is placed under the direct authority of an immediate superior in the technical chain.

He/she has a hierarchical command over the technicians within his/her area of responsibility.

He/she may delegate certain tasks to technicians.

In his/her specialty, he/she is a key contact person for artists and crew.

6 –Job category

- Under the French national collective convention for artistic and cultural businesses (IDCC 1285): Technical Chain, the technical stage manager is a class 6 manager;
- Under the national collective convention for private sector businesses in the performing arts (IDCC 3090): Live Arts Technical Chain, the technical stage manager is a supervisor;
- Under the national collective convention for technical businesses serving creative production and live events (IDCC 2717): Performing Arts and Live Events Chain, the technical stage manager is a class 4 employee;
- In the French civil service, he/she is part of a technical chain, in the framework of employment of regional/local technicians (category B);
- Depending on the legal nature of the organization, he/she may also have another status (e.g.: contracting agent, or assigned/delegated agent of the national or local/regional civil service).

7 - Possible paths towards exercising this profession

The profession of technical stage manager may be exercised:

- following professional experience within the specialization or in another profession in the performing arts, particularly in the technical fields, supplemented by phases of continuous training;

- after a path of professional training certified at level III preparing for this profession, supplemented by experience in the sector.

8 - Possible variations according to sector or type of organization

The job of technical stage manager may be carried out within varying professional situations, depending on the type and size of the organization, its activities, and the human and technical resources at its disposal. The context in which the job is exercised determines the scope of activities and responsibilities and its status. It may be carried out within several forms of specialization.

In his/her specialty:

He/she may manage technical teams of highly variable sizes, depending on the type of organization.

He/she may be assigned to the production phases of the show or event.

He/she may manage resources, stage equipment and machinery of different dimensions.

He/she may be assigned to technical stage management on a program for one or several seasons, or for a specific production, or even for a variety of cultural activities.

He/she may work under very different configurations in venues that may or may not be equipped, or even out of doors.

He/she may work for distribution/exhibition organizations (theatres, cultural venues, festivals, etc.), for producers with or without fixed residence (companies, music producers) or for technical or event management service providers. He/she may exercise his/her profession while on tour.

He/she may develop a strong specialization due to the diversification of stage equipment and machinery.

He/she may hold certifications, accreditations, authorizations and specific permits (SSIAP, SST, CACES, electricity, machinery/hoisting, etc.).

9 - The profession in the future

Factors of change

Institutional and political factors

- Changes in local jurisdiction and pooling of resources between communities;
- Increase in number of venues for productions and events under the remit of local authorities
- Increase in the amount of international cultural exchanges.

Artistic factors

- Development of cross-disciplinary productions and hybrid works that draw on a wider variety of technical teams and technologies;
- Development of new stage aesthetics, introducing new technologies of light, imagery, video, sound, virtual reality, 3D printing, etc.;
- Development of production of shows and events in alternate spaces and venues not designed for the performing arts.

Economic factors

- Increase of co-productions with different types of entertainment promoters, and pooling of resources together;
- Emergence of new modes of production relating to budgetary constraints, and necessitating shorter production periods, greater reactivity, continuous reorganization, and a multiplication and greater variety of partners;
- Emergence of new modes of production, distribution, touring, and exhibition relating to international trends;
- Multiplication of non-institutional venues and events;
- Outsourcing of a section of personnel and technical means within service provider companies dedicated to the performing arts and events;

- Variation of financial means.

Technical factors

- Development of robots, computers, networks, and the internet;
- Accelerated obsolescence of equipment and machinery related to technological advances;
- Diversification of the organization's offer of service through digital means;
- Changes to the entire skill sets of technical teams;
- Disintegration of documents and procedures.

Social factors

- Development of egalitarian policies of access to professions: gender parity, people with disabilities, etc.
- Implementation of policies encouraging sustainable development;
- Increasingly complex regulations relating to health & safety and risk prevention, being applied to both professionals and general public.

Factors of change affecting the profession of technical stage manager

- Elongation of the preparation phase and of configuration of equipment and machinery before production due to new technologies;
- Development of digital networks and their interconnectivity;
- Deeper specialization within technical teams;
- Greater demands on technological awareness, and more research and development activities, to identify new developments and anticipate needs.