Profession: TECHNICIAN
Specialties: light, stage, sound, video image

1 - Alternate titles and related professions

Specialized titles: Lighting technician, stage technician, sound technician, video-image technician
Alternate titles: /
Related professions: Follow-spot operator, electrician, stage technician, carpenter, fly person, rigger, structural technician, systems technician, instruments technician, backline technician, projectionist, light board/desk operator

2 - Functions and activities of the profession

Functions
Within his/her specialty, the technician carries out the necessary preparation, set-up, adjusting, operation, and take-down (get-out) of equipment and machinery for the running of shows and events. He/she ensures proper and regular maintenance and upkeep of stage equipment and machinery.

Activities
Within his/her specialty, he/she:
• makes the necessary technical and logistical preparations for the production and operation of shows and events, within the framework of the organization’s artistic and cultural projects;
• carries out the get-in (set-up), adjustments, and take-down (get-out) of machinery and equipment;
• provides service to shows and events in performance;
• performs technical effects in accordance with artistic requests;
• correctly stows and stores machinery and equipment;
• carries out regular upkeep and maintenance of stage machinery and equipment;
• participates in creating proper reception and working conditions for technical teams;
• participates in creating proper conditions for reception and overall comfort of audience;
• implements rules of health & safety and risk prevention that apply to professionals and general public alike.

3 – Responsibilities

Within his/her specialty, he/she takes responsibility for:
• set-up (get-in), adjusting, take-down (get-out), and operation of machinery and equipment assigned to him/her, within the context of standard operating procedure;
• the proper working order of stage machinery and equipment, within the guidelines of standard procedure for maintenance and upkeep;
• following the production schedule;
• adhering to guidelines of health & safety and risk prevention.
4 - Skills

The profession of technician 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 stage arts, 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;
Understanding technical riders and reading the layout plan, working with the artistic and technical teams;
Proposing technical solutions to existing constraints;
Proposing purchases, rentals, renewals, or adaptations of technical equipment;
Proposing improvements to functionality.

**Organization and management**

Specific skills

*Within his/her specialty:*
Taking into account specific issues and constraints of an exhibition venue for shows and events;
Working together with different technical teams;
Receiving rented or purchased equipment and making returns.

**Cross-sector skills**

<table>
<thead>
<tr>
<th>Organization – Management</th>
<th>Activity reports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Organizing tasks according to action plan;</td>
</tr>
<tr>
<td></td>
<td>Proposing improvements in order to provide better service;</td>
</tr>
<tr>
<td></td>
<td>Accounting for completed work and conditions of action;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upkeep – Maintenance</th>
<th>Stock and supply management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Verifying inventory of equipment and products and discarding outdated products;</td>
</tr>
<tr>
<td></td>
<td>Applying rules of storage of equipment and products;</td>
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<td></td>
<td>Updating documentation tracking consumables and quantifying needs for equipment and products;</td>
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<td>Placing orders for supply;</td>
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<td>Receiving and inspecting the condition and quality of incoming equipment and products.</td>
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**Running of shows and events**

Specific skills

*Within his/her specialty:*
Carrying out, according to standard procedure, the get-in/out, the rigging, wiring, adjustments, electrical 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 testing equipment and machinery in the control rooms (consoles, desks, command & communication interfaces, etc);
Proposing technical solutions in response to artistic requests;
Installing equipment taking into account constraints, needs, and specifications/compatibility of other equipment;
Communicating any changes to the layout plan;
Communicating operating guidelines;
Adjusting settings on equipment and machinery in accordance with artistic requests;
Generating technical effects in accordance with artistic requests;
Solving technical problems affecting the proper running of the show/event;
Making the show/act/scene preset.
Making required changes to the set or stage;
Tidying and cleaning the stage area before and after performances;
Driving mobile elevated work platforms (MEWP’s) and using hoisting machinery;
Transporting equipment.

Cross-sector skills

<table>
<thead>
<tr>
<th>Upkeep – Maintenance</th>
<th>Operations of upkeep and maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Applying a protocol for upkeep and maintenance;</td>
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<tr>
<td></td>
<td>Using correct standards and operating techniques when using products and equipment;</td>
</tr>
<tr>
<td></td>
<td>Verifying maintenance levels when cleaning a venue or piece of equipment or machinery;</td>
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<td></td>
<td>Running diagnostics and alerting to high level malfunctions;</td>
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<tr>
<td></td>
<td>Storing equipment and products after use;</td>
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<td></td>
<td>Collecting, sorting, and disposing of waste;</td>
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<td></td>
<td>Filling forms relating to use or maintenance of machinery or equipment.</td>
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</table>

**Human resources**

**Specific skills**

Fitting into a team and working collectively;
Facilitating co-activity between different teams working on shows and events

**Safety and risk prevention**

**Specific skills**

*Within his/her specialty:*

Installing stage machinery and equipment according to safety rules;
Identifying and evaluating safety risks and alerting superiors in the hierarchy;
Proposing, having validated, and implementing additional measures offsetting 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.
5 -Place in the company's organizational chart
The technician is part of the technical chain.
He/she is placed under the authority of an immediate superior in the hierarchical chain.

6 -Job category
- Under the French national collective convention for artistic and cultural businesses (IDCC 1285):
  Technical chain, the technician is a supervisor/foreman, class 7;
- Under the national collective convention for private sector businesses in the performing arts (IDCC 3090):
  Live Arts Technical Chain, the technician is a qualified employee, class 1;
- Under the national collective convention for technical businesses serving creative production and live events (IDCC 2717):
  Performing Arts and Live Events Chain, the technician is an employee, class 3;
- In the French civil service, he/she is part of a technical chain, in the framework of employment of technical deputies and regional supervisors (category C);
- 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 technician may be exercised:
- following professional experience within his/her specialty or in another profession on the performing arts, or in another technical area, supplemented by phases of continuous training;
- after a path of professional training certified at level IV preparing for this profession, supplemented by experience in the sector.

8 -Possible variations according to sector or type of organization
The job of technician may be carried out within professional situations quite different from one another, 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 is possible to exercise several specialties.

Within his/her specialty
He/she may work within technical teams of highly variable sizes, depending on the type of organization.
He/she may participate in the creative production phases of the show or event.
He/she may work 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 technician
- 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.