



ANSI E1.14 – 2018
Entertainment Technology —
Recommendations
for Fog Equipment Manuals

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The ESTA Technical Standards Program

The ESTA Technical Standards Program was created to serve the ESTA membership and the entertainment industry in technical standards related matters. The goal of the Program is to take a leading role regarding technology within the entertainment industry by creating recommended practices and standards, monitoring standards issues around the world on behalf of our members, and improving communications and safety within the industry. ESTA works closely with the technical standards efforts of other organizations within our industry and represents the interests of ESTA members to ANSI, UL, and the NFPA. The Technical Standards Program is accredited by the American National Standards Institute.

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The Fog and Smoke Working Group, which authored this standard, consists of a cross section of entertainment industry professionals representing a diversity of interests. ESTA is committed to developing consensus-based standards and recommended practices in an open setting.

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Key to Interest Categories

CP Custom-market Producer
 MP Mass-market Producer
 DE DEsigner
 DR Dealer/Rental company
 U User
 G General interest

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1 Scope

This standard shall apply to the instruction manuals for fog equipment manufactured for use in the entertainment industry to create atmospheric effects.

This standard sets minimum requirements for the information manufacturers need to supply in fog equipment manuals and for the distribution of this information. This standard does not remove or negate any requirements imposed by other standards, laws, or government regulations.

2 Purpose

There are several technologies used for the production of fog effects today, with each technology creating a specific type of effect. For every technology there are several manufacturers designing fog-making systems that are unique in and of themselves. In order to facilitate the safe and effective use of fog, the user must have some general knowledge of the technology, have a clear understanding of how to operate the fog making system, and be aware of the potential hazards related to the use of fog, and particularly the system that he is using.

This standard is designed to establish guidelines for manufacturers to provide to the user by way of an instruction manual the necessary information required for the safe and responsible use of their fog equipment. This standard sets minimum requirements and does not limit the amount of additional information that a manufacturer can include in the manual. It is encouraged that the manual developed in accordance with this standard be part of a comprehensive product stewardship program.

Atmospheric effects are visual effects; users of fog equipment are therefore assumed to have functional eyesight. The fog equipment manuals that are the subject of this standard are documents intended to be read and are published in Hard-Copy or are made available in Electronic Format on a website or some other visual medium.

3 Definitions

3.1 Electronic Format: Any printed format that requires an electronic device to be made legible. Common examples would include a website page or a PDF document that must be read on a computer or electronic tablet.

3.2 Hard-Copy: Any printed format that is on a durable substrate and that does not require an electronic device to be made legible.

3.3 PDF: a computer data file format that provides an image of text or text and graphics that looks like a printed document and that can be viewed, printed, and electronically transmitted. It is defined by ISO 32000-1:2008.

3.4 Portable Memory Device: A device for storing a machine-readable file, such as a CDROM, floppy disk, or a USB memory stick.

3.5 Shall: Indicates a mandatory requirement.

3.6 Should: Indicates a recommendation or that which is advised but not required.

4 Document media and distribution

The fog equipment manual shall be permitted to be published in Hard-Copy or Electronic Format. However, if published in Electronic Format, a selection of the Inclusions listed in this standard shall be published in Hard-Copy with information about where the reader can access the rest of the equipment manual.