

NEMA Standards Publication SB 10-2016

Audio Standard for Nurse Call Systems

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FOREWORD

The preparation of this standard publication was initiated in response to input from the Veterans Administration. Input from other interested parties has also been sought and evaluated. Inquiries, comments and proposed or recommended revisions should be submitted to the concerned NEMA product subdivision at the following address:

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NEMA standards publications are periodically reviewed to meet changing conditions and technical progress, and the latest edition shall be used. Comments from the users of NEMA SB 10-2016 are welcome, and should be sent to the above address.

By way of introduction, a nurse call system is used in healthcare facilities to provide audible tones and visual indications to alert staff of patient requests for help or assistance. Audio (voice) communication may be provided in addition to the primary audible and visual signaling indications to optimize and enhance staff response to patient requests for attention or assistance.

NFPA 99 *Health Care Facilities Code*, together with NFPA 70 *National Electrical Code*® and applicable state and local building codes, determines the requirements for nurse call systems in healthcare facilities. As of the 2015 edition of NFPA 99, the requirements for nurse call systems are codified. Most states typically rely on NFPA 99 and NFPA 70 to establish state and local requirements with little, if any, change.

ANSI/UL 1069 *Hospital Signaling and Nurse Call Equipment* provides detailed and specific construction, reliability, performance, and safety requirements for nurse call systems and associated equipment. It defines the fundamental equipment required and fundamental operations of a nurse call system, as well as the requirements for installation and user operation. Comprehensively, ANSI/UL 1069 is in conformance with the requirements set forth in NFPA 99 and NFPA 70. However, there is no standard that defines audio performance characteristics.

Therefore, this audio standard, NEMA SB 10-2016, is intended to be used by nurse call system manufacturers to claim conformity to a consensus audio standard, even though there is no third party NRTL assessment, certification, or requirement.

This NEMA standards publication is the result of many years of research and investigation by members of NEMA and some members of the ANSI/UL 1069 standards technical panel. It was developed through consultation among manufacturers, users, and testing laboratories, and it reflects the study of the standards and technical documents identified in section 1.4, which were helpful in its preparation.

NEMA SB 10-2016 is developed and maintained by the NEMA 3SB-2 Health Care Communications and Emergency Call Systems Group. Publication of this standard does not necessarily imply that all members of the 3SB-2 product group voted for approval or participated in its development.

At the time NEMA SB 10-2016 was approved, the 3SB-2 Health Care Communications and Emergency Call Systems Group consisted of the following members:

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Section 1 General

1.1 Scope

This publication contains the necessary requirements and test procedures to evaluate the audio quality of the loud speakers and microphones that may be provided in nurse control stations, patient stations, and pillow speakers of a UL listed nurse call system.