

DIGITAL ALARM COMMUNICATION TRANSMITTER (DACT)

Date: April 2015 Effective Date: June 1, 2015

INTERPRETATION

- What: Digital Alarm Communicator Transmitter (DACT) requirements for approval will utilize the NFPA 72, 2013 edition.
- **Why:** The issue of utilizing Managed Voice Facilities Networks (MVFN) was discussed with stakeholders including fire departments (noted below), Alarm Company representatives (Fire Protection Inc., Performance Systems, Sonitrol Pacific, Ace Fire, Red Hawk Fire and Security), and a MVFN provider (Comcast).

Reliability concerns of DACT's using MVFN were discussed by fire departments and alarm system companies on March 19, 2015. Since the National Fire Protection Association (NFPA) Technical Committee has vetted this issue in the standards development process, our [fire departments] determination concludes that the most recent published NFPA 72 (2013 edition) better addresses the concerns on approving DACT's as a signal transmission method.

26.6.3.2.1.4 Transmission Channels.

- A) A system employing a DACT shall employ one telephone line (number). In addition, one of the following transmission means shall be employed:
 - (1) One-way private radio alarm system
 - (2) Two-way RF multiplex system
 - (3) Transmission means complying with **26.6.3.1** (see below for this language)

Exception: Where access to two technologies in the preceding list is not available at the protected premises, with the approval of the authority having jurisdiction, a telephone line (number) shall be permitted to be used as the second transmission means. Each DACT shall be programmed to call a second DACR line (number) when the signal transmission sequence to the first called line (number) is unsuccessful. The DACT shall be capable of selecting the operable means of transmission in the event of failure of the other means. Where two telephone lines (numbers) are used, it shall be permitted to test each telephone line (number) at alternating 6-hour intervals.

26.6.3.1 Performance-Based Technologies.

26.6.3.1.1 Conformance. Communications methods operating on principles different from specific methods covered by this chapter shall be permitted to be installed if they conform to the performance requirements of this section and to all other applicable requirements of this Code.

26.6.3.1.2 Federal Communications Commission. Alarm system equipment and installations shall comply with the Federal Communications Commission (FCC) rules and regulations, as applicable, concerning electromagnetic radiation, use of radio frequencies, and connections to the public switched telephone network of telephone equipment, systems, and protection apparatus.

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26.6.3.1.3 NFPA 70, National Electrical Code. Equipment shall be installed in compliance with **NFPA 70**, National Electrical Code.

26.6.3.1.4 Communications Integrity. Provision shall be made to monitor the integrity of the transmission technology and its communications path.

26.6.3.1.5 Single Communications Path. Unless prohibited by the enforcing authority, governing laws, codes, or standards, a single transmission path shall be permitted, and the path shall be supervised at an interval of not more than 60 minutes. A failure of the path shall be annunciated at the supervising station within not more than 60 minutes. The failure to complete a signal transmission shall be annunciated at the protected premises in accordance with **Section 10.15**.

26.6.3.1.6 Multiple Communications Paths. If multiple transmission paths are used, the following requirements shall be met:

- (1) Each path shall be supervised within not more than 6 hours.
- (2) The failure of any path of a multipath system shall be annunciated at the supervising station within not more than 6 hours.
- (3) The failure to complete a signal transmission shall be annunciated at the protected premises in accordance with **Section 10.15**.

26.6.3.1.7 Single Technology. A single technology shall be permitted to be used to create the multiple paths provided the requirements of **26.6.3.1.6(1)** through **26.6.3.1.6(3)** are met.