


TECHNICAL BULLETIN CITY OF RALEIGH, N.C. www.raleighnc.gov				OFFICE OF THE FIRE MARSHAL	
Subject		Bulletin #	SECTION	PAGE 1 of 3	EFFECTIVE DATE 9/2/2009
Entertainment and Sound Shunt Device		TB-15	PREPARED BY Office of the Fire Marshal		Revision Date 02/03/2024 KTB

1.0 Purpose

To establish minimum standards in design, installation and performance of systems and equipment designed to shunt or disconnect sound emitting devices during emergency situations.

2.0 Organization(s) Effected

City of Raleigh Fire Marshal's Office

3.0 References

North Carolina Fire Prevention Code Section (Current adopted edition)

City of Raleigh Code of Ordinances §12-2118 through 12-2130

4.0 Requirements

4.1 General Requirements

All nightlife establishment permitted occupancies that produce sound sufficient to interfere with emergency warnings and warning devices shall have a shunt trip breaker installed to eliminate the power to all sound producing devices and any special lights associated with the sound. Sound producing devices include, but are not limited to televisions, monitors with sound emitting devices, karaoke equipment, live bands, DJ booths, juke boxes, and microphones. NCFPC authorizes the code official to require any additional safeguards when special hazards exist. The Code official may require additional safeguards where loud music, bright and / or flashing lights and alcohol are present.

Exception: Where shunt type breakers can adversely affect Commercial/professional sound equipment with immediate loss of power. If the commercial/professional equipment is equipped with built in sound shut off circuits attached the buildings Fire Alarm and Manual actuator, then shunt type breakers shall not be required for power disconnect.

4.2 Manual Shunt Trip Actuator

Occupancies with or without a fire alarm system in which Nightlife Establishment provisions apply, shall have a Manual Shunt Trip Actuator. The manual shunt trip actuator shall be installed at a **constantly attended** location, i.e. DJ booth, front desk, behind a working bar, etc. The actuator shall be fully visible, fully accessible, and unobstructed. The manual shunt trip actuator shall be a **RED UL LISTED E STOP BUTTON (Emergency Stop Button)**. Maximum height of the shunt trip actuator shall be 6 feet Above Finished Floor.

4.3 Interconnection with Fire Alarm System

Occupancies having fire alarm systems in which Nightlife Establishment provisions apply, shall be interconnected with the shunt trip breaker or professional sound equipment for automatic control upon Fire Alarm activation. All sound producing devices and special lights shall be de-energized or turned off **EXCEPT FOR FIRE ALARM NOTIFICATION DEVICES** when any initiating device activates the fire alarm system. No fire detection or protection device shall be installed on a circuit controlled by a shunt trip device or system.

4.4 Performance

The configuration of the shunt trip system shall be such that an activation of either the shunt trip system via the building fire alarm system, the activation of the E Stop button, or both shall require manual resetting of the shunt trip breaker at the breaker panel. **E Stop buttons configured to re-energize the circuit(s) when the plunger is reset to the ready position shall not be accepted.**

4.5 Signage

All occupancies in which amplified entertainment provisions apply shall have signage installed at or within 8 inches of the E Stop actuator. Signage shall be of durable construction and permanently affixed. Signage dimensions shall be at minimum 7 inches in width, and at minimum 5 inches in height, with red background, having white lettering at minimum 1 inch in height. Verbiage of sign shall read **"SOUND SHUT OFF"** (see Figure A. below). Signage shall not be blocked, defaced or obscured at any time. All shunt breakers in breaker panel(s) shall be labeled plainly and legibly **"SOUND SHUNT"**. Sound producing devices shall not be installed utilizing receptacles not protected by a Shunt Trip breaker.

Signage Example

Figure A



EMERGENCY STOP ACTUATOR EXAMPLES : No key operated actuators

