



**TECHNICAL STANDARDS SERIES**

**BGLC 4:**

**Technical Standards for Route  
Operation Machines  
Phase 1**

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### **ABOUT THIS STANDARD**

The Betting Gaming and Lotteries Commission acknowledges with thanks the assistance provided by Gaming Laboratories International in the development of these standards. The Standards are themselves the result of best practices adopted by gaming regulators from several jurisdictions involved in gaming regulation.

## 1. Introduction To Technical Requirements

1.1. **Introduction.** This chapter sets forth the technical requirements for the key attributes of a gaming device or machine.

## 2. Machine Identification

2.1. **Identification Badge.** A gaming device shall have an identification badge affixed to the exterior of the device by the manufacturer. The identification badge shall not be removable without leaving evidence of tampering. This badge shall include the following minimum information:

- a. The complete name of the manufacturer or some appropriate abbreviation for same;
- b. A unique serial number;
- c. The gaming device model number; and
- d. The date of manufacture.

## 3. Basic Machine Hardware Requirements

3.1. **Printed Circuit Board (PCB) Identification Requirements.** Identification for any PCB that impacts the integrity of the gaming device shall include the following:

- a. Each PCB shall be clearly identifiable by an alphanumeric identification and, when applicable, a revision number. It is recommended that this identification be readily viewable without removal of the PCB from the gaming device; and
- b. If track cuts, patch wires, or other circuit alterations are introduced to the PCB, then a new revision number shall be assigned.

3.2. **Switches and Jumpers.** If the gaming device contains switches and/or jumpers, the following rules shall be met:

- a. All hardware switches or jumpers shall be fully documented for evaluation by the independent test laboratory

3.3. **Displays and Monitors.** If a machine is equipped with a display/monitor, the following rules apply:

- a. The display/monitor shall fit properly into the machine and the surrounding bezel in a manner that eliminates gaps or voids, resists the entry of objects, and which does not physically obscure or cover any required game display information;
- b. The resolution of the configured display/monitor shall be compatible with one or more of the resolutions supported by the gaming device software in a manner that ensures the intended function of the display; and
- c. The resolution of the configured display/monitor shall not clip or fail to display any information critical to game play.

#### **4. Machine Electrical Power**

- 4.1. **Power Surges.** The gaming device shall not be adversely affected, other than resets, by surges or dips of  $\pm 20\%$  of the supply voltage. It is acceptable for the gaming device to reset provided no damage to the equipment or loss or corruption of data is experienced. Upon reset, the game must return to its previous state. It is acceptable for the game to return to a game completion state provided the game history and all credit and accounting meters reflect a completed game.
- 4.2. **Circuit Protection.** The power supply used in a gaming device must be appropriately fused or protected by circuit breakers. The amperage rating of all fuses and circuit breakers must be clearly stated on or near the fuse or the breaker.
- 4.3. **On/Off Switch.** An on/off switch that controls the electrical current supplied to the machine shall be located in a place which is readily accessible within the interior of the gaming device. The on/off positions of the switch shall be clearly labeled.

#### **5. Machine Doors**

- 5.1. **Physical Security.** A gaming device shall be robust enough to resist forced entry into any secured doors, areas, or compartments. In the event that extreme force is applied to the cabinet materials causing a potential breach in machine

security, evidence of tampering must be conspicuous. “Secured areas” or “secured compartments” shall include the logic area(s), external doors such as the main door or belly door, cash compartment doors such as a drop box door, peripheral device access area(s), and/or other sensitive access areas of the gaming device that can potentially impact game integrity such as top boxes, controllers, etc

**5.2. External Doors.** The following requirements apply to the gaming device’s external doors (e.g., main, belly, top box, etc.):

- a. External doors shall be manufactured of materials that are suitable for allowing only legitimate access to the inside of the gaming device cabinet. Doors and their associated hinges shall be capable of withstanding determined and unauthorized efforts to gain access to the interior of the gaming device and shall leave conspicuous evidence of tampering if such an attempt is made;
- b. The seal between the gaming device cabinet and the door of a locked area shall be designed to resist the entry of objects. It shall not be possible to insert an object into the gaming device that disables a door open sensor when the gaming device’s door is fully closed, without leaving conspicuous evidence of tampering; and
- c. All external doors shall be secure and support the installation of locks.

## **6. Machine Program Storage Devices**

**6.1. General Statement.** The term Program Storage Device (PSD) is defined to be the physical storage media or electronic device that contains a critical control program or software that affects the integrity of the gaming device. Types of PSDs include, but are not limited to, EPROMs, Compact Flash and CFast cards, optical disks, hard drives, solid state drives, and USB drives. For the purpose of this technical standard, logical partitions defined on a disk drive shall be viewed as separate PSDs. This partial list of PSD types may change as storage technology evolves.

**6.2. PSD Identification.** A PSD shall be clearly labeled with sufficient information to identify the software and revision level of the information stored on the device. It is acceptable for the gaming device to alternatively display this information via an attendant menu. In either case, each PSD shall be uniquely identified by the following information:

- a. Manufacturer identification, as appropriate;
- b. Program ID number;
- c. Version number, if applicable

## **7. Player Interaction Devices**

**7.1. Touch Screen Displays.** All touch screen displays shall meet the following rules:

- a. Touch screen displays shall be accurate, and if required by their design, shall support a calibration method to maintain that accuracy; alternatively, the display hardware may support automatic selfcalibration; and
- b. If applicable to design, a touch screen display shall be capable of being manually re-calibrated without access to the gaming device cabinet other than opening the main door.