

# Four Loko-Motion

## Test Case Documentation

(Rev A. 04/04/11) | <http://embedded.franscape.com>

### TEST NUMBER #1

#### Requirement:

Device initialization

#### Use case:

Start-up sequence, from power on to start of a game

#### Test sequence:

1. Power on device (cold boot)
2. Each screen should start up, and announce to main board when ready
3. When all four screens are ready, game should begin with LCD #1 as the active screen

#### Known problems:

Requires LCD #1 to be facing the user on startup. For now, this is hardcoded.

## **TEST NUMBER #2**

### **Requirement:**

Screen rotation stress test

### **Use case:**

Used in all use cases featuring a screen change

### **Test sequence:**

1. Rotate clock-wise at full speed for 1 minute
2. Store distance rotated in memory
3. Rotate counter-clock-wise at full speed for 1 minute
4. Store distance rotated in memory
5. Examine distance rotated in each direction for accuracy and precision

### **Known problems:**

## **TEST NUMBER #3**

### **Requirement:**

Screen rotation precision test

### **Use case:**

Used in use cases featuring a screen change

### **Test sequence:**

1. Rotate device clock-wise in 90-degree intervals, 100 times
2. Visually inspect orientation of device, ensure that it is correctly in the initial position
3. Rotate device counter-clock-wise in 90-degree intervals, 100 times
4. Visually inspect orientation of device, ensure that it is correctly in the initial position

### **Known problems:**

Visual inspection may not be precise enough to find small errors in the rotation precision, though it should be enough to avoid noticeable errors during normal gameplay.

## **TEST NUMBER #4**

### **Requirement:**

Screen rotation, in game

### **Use case:**

Used when a user changes screens during gameplay

### **Test sequence:**

1. During gameplay, press the left bumper on the controller
2. Game pauses
3. Screen turns counter-clock-wise 90 degrees
4. Game resumes
5. Game state changes to reflect new primary screen (i.e. tetris block changes screens)

### **Known problems:**