**Events**

* Tactile Button Press (1-4 buttons)
* Countdown (in Milliseconds)
* Shake (Accelerometer)

**Badge Interface Protocol**

Communication interface: Serial over USB, 9600 baud 8N1.

**Commands**

1. Return Firmware Information
   1. ?
   2. Response: RainbowBadgeDemoFW V1.00
2. Clear Receive Buffer
   1. –
   2. Response: CLR
3. SetEvent
   1. E[0] = 1,2
      1. E is the command keychar.
      2. 0 is the event type (button 1 pressed, button 2 pressed, shake etc.).
      3. Values after the equals sign are event specific configuration values. These include the enabled state of the event, the event action (what to do when the event is detected e.g. goto next frame, goto previous frame, goto specific frame, goto random frame, increase brightness, decrease brightness etc.).
4. Set Frame Pointer
   1. F = 0
      1. F is the command keychar.
      2. 0 is the frame index.
   2. Used to point to a specific frame when changing it’s LED colours etc.
5. Set Number Of Frames
   1. N = 0
      1. N is the command keychar.
      2. 0 is the number of frames stored in EEPROM.
6. Set LED Colour (applies to LEDs in current frame)
   1. L[0] = 255,255,255
      1. L is the command keychar.
      2. 0 is the LED index (0-24).
      3. First curly brace argument is the Red colour value.
      4. Second curly brace argument is the Green colour value.
      5. Third curly brace argument is the Blue colour value.
7. Set Global LED Brightness (on badge poweron)
   1. B = 0
      1. B is the command keychar.
      2. 0 is the brightness (10 - 250).