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Technical Bulletin

Firefly X10 Ramp Table Data

The Firefly X10 card can be used to spin reels in a gaming machine. This Technical Bulletin shows ramp table data and how it can be used.

The following example is for the Starpoint 12RM, 48 Step Reel:

```
(1)     /***    Ramp 96     ***/
(2)     usbRampTable RampUp96rpm    = { 6, { 100, 37, 26, 14, 23, 13 } };
(3)     usbRampTable RampDown96rpm  = { 5, { 15, 25, 16, 41, 100 } };
```

Explanation

(1) General Description. (Commented-out.)

(2) Structure containing the **Ramp Up** table. This structure is as follows:

(a) Open Brace. There are **6** parameters in the Ramp Up table.
(b) Open Brace. There is a **100 ms** stabilize pulse before Ramp Up.
(c) There are **4** Ramp Up delays at the specified ms pulses.
(d) There is **1** Run delay at **13ms** pulses.
(e) Close both Braces.

(3) Structure containing the **Ramp Down** table. This structure is as follows:

(a) Open Brace. There are **5** parameters in the Ramp Down table.
(b) Open Brace. There are **4** Ramp Down delays at the specified ms pulses.
(c) There is a **100 ms** Settle Time before the Duty Cycle.
(d) Close both Braces.

The Duty Cycle is hard coded into the software driver and is pulsed at **50 ms Off/On** to prevent Reel movement. This is known as “Chopping” the voltage to prevent the TPIC drivers from overheating.

Note: All Firefly X10 ramp tables follow the same general format.

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