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This page summarises information for the first production Luxe software version (version 1.11).

Luxe Adjustment Overview:

Electronics adjustment using the Lux stock circuitry is EXTREMELY simple. In fact, it's so simple that you really don't need instructions for it, if not to read details on the specifics for the various settings. All adjustments are carried out using the joystick within the frame, and you can immediately teach yourself how to surf the adjustment menu just by trying it on your own with the help of the audio controller.

As said, all electronics adjustment is carried out using the 5-way joystick located on the surface of the circuit board. The joystick has four "side" directions of movement, and can also be clicked "in" for the fifth direction. Pushing the joystick in and holding it for one second enters the adjustment mode's main menu.

Once within the main menu, you can surf forward and back between the various adjustment settings. The controller will audibly call out each setting as you select it, and the LED bar color/pattern will also designate the new setting if the speaker is muted.

Making a change to a setting is accomplished by moving the joystick in the + or - direction (positive or negative), the two directions opposite of the directions used to select the adjustment. The controller will audibly announce a successful adjustment, and the LED bar will also change, again if the speaker is muted.

The new setting is automatically saved. Pushing and holding the power button, or pushing and holding the joystick will exit the adjustment mode.

Note: Avoid holding the joystick inward for extended periods of time. Holding the stick to the inward position for more than three seconds will reset all settings to the factory defaults.

Global side LED patterns:

The two side LEDs bordering the four-high LED bar can be used to visually indicate which section of the adjustment mode you are currently within.

Red green - Adjustment mode, main menu

Blue green - Firing mode selection (uses varied color bar LEDs)

Blue blue - Numerical value selection (uses red bar LEDs, blinking or solid)

Adjustment Main Menu:

The massive chart below displays each adjustment setting and its features. The controller voice will announce each setting as you select it (this is the bold text). While this feature is very useful, it can also become confusing if you're already accustomed to something being called a different name. For that reason I'm also providing a more generic term for the adjustment setting in parenthesis () after the audio bold text.

When moving through the main menu, the two side LEDs will be lit red/green to signify the main menu. When adjusting a setting, the side LEDs may change color, as will the LED bar too. The settings will return to the main menu after a short time.

LED pattern:	Adjustment:																
red	<p>Firing mode This uses the LED bar to select the active firing mode. The two side LEDs will change to blue/green, and the LED pattern progression will be the same as this menu. Firing modes in order:</p> <table> <tbody> <tr> <td>- 1red - Semiauto uncapped</td> <td>4blu - Training mode</td> </tr> <tr> <td>- 2red - Semiauto capped</td> <td>1grn - Adjustable burst mode</td> </tr> <tr> <td>- 3red - NXL fullyauto</td> <td>2grn - Fullyautomatic</td> </tr> <tr> <td>4red - PSP ramp</td> <td>1prl - Custom mode 1</td> </tr> <tr> <td>1blu - Millennium ramp</td> <td>2prl - Custom mode 2</td> </tr> <tr> <td>2blu - CFOA ramp</td> <td>3prl - Custom mode 3</td> </tr> <tr> <td>3blu - Autoresponse</td> <td>4prl - Custom mode 4</td> </tr> <tr> <td></td> <td>1ylo - Custom mode 5</td> </tr> </tbody> </table>	- 1red - Semiauto uncapped	4blu - Training mode	- 2red - Semiauto capped	1grn - Adjustable burst mode	- 3red - NXL fullyauto	2grn - Fullyautomatic	4red - PSP ramp	1prl - Custom mode 1	1blu - Millennium ramp	2prl - Custom mode 2	2blu - CFOA ramp	3prl - Custom mode 3	3blu - Autoresponse	4prl - Custom mode 4		1ylo - Custom mode 5
- 1red - Semiauto uncapped	4blu - Training mode																
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3blu - Autoresponse	4prl - Custom mode 4																
	1ylo - Custom mode 5																
red	<p>Dwell time The amount of time for which the solenoid will be energized. This equates to the approximate amount of time during which the marker's valve will be "open" releasing pressure to fire the ball. Adjustable between 4-25 milliseconds, in 1-ms increments.</p>																
red	<p>Training dwell (training mode dwell time) This is the shortened dwell time used when Training mode is active. Using this mode the marker is not meant to fully cycle, only kick the bolt slightly forward as to provide some of the feel observed when actually firing the marker. This setting is adjusted between 1-8 milliseconds, in 1-ms increments.</p>																
red	<p>Software version (check software version) This option will audibly announce the current software version being used.</p>																

- - - blue	<p>Vision mode (Vision eye mode)</p> <p>Select one of three eye modes, depending on loader reliability.</p> <p>1 - Vision only - Marker only fires when a ball is present and ready to be fired.</p> <p>2 - Delay shot - Marker will fire with or without a ball loaded, however the ROF is significantly limited when no ball is loaded.</p> <p>3 - Vision with forced shot - Similar to "Vision only" setting 1, however this also allows you to force a <i>clearing shot</i> by holding the trigger for two seconds.</p>
- blue -	<p>Loader delay</p> <p>This is a slight delay between the eyes detecting a loaded ball and the marker actually allowing you to fire. Adjustable starting at 0-ms (no delay) in 1-ms increments. This setting need not ever be set higher than 3-ms unless you're not using a force-fed hopper.</p>
- blue - -	<p>BPS limit (maximum ROF)</p> <p>Maximum firing speed in balls-per-second. Adjustable between 11-25 bps, in 1-bps increments. Using the setting of "25" will effectively remove the ROF cap.</p>
blue - - -	<p>BPS fine adjust (max ROF fine adjustment)</p> <p>This setting is used to add a small fraction of one BPS to the total ROF cap. Settings are:</p> <p>0.00-bps added to the mROF</p> <p>0.25-bps added to the mROF</p> <p>0.50-bps added to the mROF</p> <p>0.75-bps added to the mROF</p>
- - - grn	<p>Bypass BPS (eye bypass ROF)</p> <p>Maximum firing speed when the eyes are manually disabled. This can be set between 8-11 bps, in 1-bps increments.</p>
- - grn -	<p>Burst count (burst mode shot count)</p> <p>Number of shots per burst pull, when using the adjustable burst firing mode. This selects between the following presets: two shot burst, three shot burst, four shot burst.</p>
- grn - -	<p>Shots to enter rebound (ramp activation shot count)</p> <p>Number of grouped shots that must be fired at or above the <i>ramp sustain speed</i> before the ramping mode will engage. Adjustable between 1-5 shots, in 1 shot increments. The required amount used here varies from tournament circuit to circuit.</p>
grn - - -	<p>Shots to sustain rebound (ramp sustain speed)</p> <p>You must manually pull this speed or faster in order to enter and continue firing using any of the ramping or NXL modes. Adjustable between 2-10 bps, in 1-bps increments.</p>
- -	<p>Trigger debounce time</p> <p>Electrical switch debounce setting used to filter out unwanted trigger sensitivity. Relatively low settings will create unwanted trigger bounce, adding shots to your ropes</p>

- ylo	or artificially increasing your firing speed. Alternately, severely low settings can even cause runaway autofiring. Setting this too high will effectively show down your firing speed; thus a median must be maintained. This adjustment can be tuned between 1-25 milliseconds, in 1-ms increments. 7-ms is the default and will work for most trigger setups.
- ylo -	Mechanical debounce setting This isn't a timer unlike the above electronics debounce setting. The mechanical debounce is an adjustment to the pre-programmed shot buffer which can be used to prevent unwanted bounce caused by runaway firing or excessively lightweight/short trigger setups. Available settings: 0 - no mechanical debounce filtering 1 - low filtering 2 - moderate filtering 3 - high filtering
- ylo - -	FSD compensation (anti-bolt stick dwell time addition) ABS (anti-bolt stick) is sometimes the solution to the problem known as first shot dropoff, or FSDO for short. This setting will add an additional few milliseconds onto your total dwell time when the marker rests idle for a short period of time. This can sometimes be used to counteract o-ring stiction causing FSDO in markers. This is adjustable between 0-25 milliseconds (0 obviously turns it <i>off</i>), in 1-ms increments. The default is 7-ms.
ylo - - -	First shot drop timer (ABS activation time) Amount of time, after which the marker's ABS dwell time will activate. Adjustable between these amounts: 1 - 20 seconds idle time 2 - 40 seconds idle time 3 - 60 seconds idle time (default) 4 - 80 seconds idle time 5 - 100 seconds idle time
- - - prl	Auto-shutdown timer Marker will auto-deactivate after this amount of time. Adjustable between 5-30 minutes in 1 minute increments (default is 20 minutes).
- prl -	Speaker volume Volume level, adjustable between seven settings, the lowest of which will mute the audio. Default 4.
- prl - -	Display time (LED display time) This controls the amount of time for which the marker operation/status LED indicators will light up. This is used when adjusting firing modes and such. Adjustable between 1-10 seconds, in 1 second increments.
prl - - -	Language Select your audio language from the five current presets. 1 - English 2 - Deutsch

3 - Français
4 - Español
5 - Pyccko

Quick Reference chart:

This is the same information as above, with less confusing details.

LED pattern:	Adjustment:	Settings:	Default:
- - - red	Firing mode	non-numeric (uses LED patterns)	Semiauto (first setting)
- red -	Dwell time	4-25 milliseconds (1-ms increments)	12-ms
- red -	Training mode dwell time	1-8 milliseconds (1-ms increments)	4-ms
red - - -	Check software version	-	-
- - - blue	Vision eye mode	1 - Vision only 2 - Delay shot 3 - Vision mode with forced shot available	1 (vision only)
- blue -	Loader delay	0-15 milliseconds (1-ms increments) Set to 0 for <i>no delay</i>	3-ms
- blue - -	Maximum ROF	11 to 25+ balls-per-second (1-bps increments) Set to the highest setting for <i>uncapped</i> ROF	13-bps

blue - - -	Max ROF fine adjust	0.00-0.75 balls-per-second added (0.25-bps increments) This adds a fraction of one BPS to the total amount.	0-bps added
- - grn	Eye bypass ROF	8-11 balls-per-second (1-bps increments)	10-bps
- grn -	Burst mode shot count	2-4 shots (1 shot increments)	3 shots
- grn -	Ramp activation shot count	1-5 shots (1 shot increments)	3 shots
grn - - -	Ramp sustain speed	2-10 balls-per-second (1-bps increments)	5-bps
- - - ylo	Trigger debounce time	1-25 milliseconds (1-ms increments)	7-ms
- - ylo -	Mechanical debounce setting	settings 0, 1, 2, 3	setting 0 (off)
- ylo - -	ABS dwell time addition	0-25 milliseconds added (1-ms increments)	7-ms added
ylo - - -	ABS activation time	20-100 seconds (20 second increments)	3 (60 seconds)

- - - pri	Auto-shutdown timer	5-30 minutes (1 minute increments)	20 minutes
- - - pri	Speaker volume	settings 0-7	setting 4
- - - pri	LED display time	display for 1-10 seconds (1 second increments)	display for 2 seconds
- - - - pri	Language	1 - English 2 - Deutsch 3 - Français 4 - Español 5 - Pyccko	1 (English)

Factory Settings Reset:

Pushing and holding the joystick for three whole seconds will reset the settings back to their default values. After the factory reset takes place the speaker will chirp several times.

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