Operating the grip

This section covers normal operation.

This guide assumes that you have Firmware revision 2.0.2x or higher in your grip – if that is not the case some of the features might not work as described.

Buttons, lights and plugs,

Located on the back of the grip are 3 buttons, a 2-color indicator (LED) and a data/charging plug.

The 3 buttons marked **①**, ▲ and ▼ and the LED are used for all operations on the grip described in the sections below. Many additional operations and features are accessible using the PC-interface this is covered in the Racegun Interface Program Manual accompanying the PC-software. See www.raceguns.dk for a complete description of the Racegun Interface Program (RIP) series of software.

Turning on and off

Turn on the grip by pressing **0** for half a second. The computer will do a self-test and return the 5-way valve to the starting position. Do not press any other buttons or the trigger during this operation. When the grip is ready, the green LED light, indicating the marker is ready and safe. To turn the grip off make sure the LED is green – then press and hold **0** until the grip beeps.

Safety

A green LED indicates that the marker is safe.

Press **②** and **▼** simultaneously for one second. A short beep will sound and the LED turns red, indicating the marker is live and ready to fire.

Press **②** and **▼** briefly to return to safe mode. Three beeps will sound and the LED will turn green, indicating the marker is on and safe.

Game Timer

The Racegun Computer Grip has a built in countdown timer with alarm, that can be set to any desired number of minutes. The timer can be started, stopped and reset by using the buttons on the grip. Activating the timer and setting the prewarning and timer length is only possible from your PC using the Racegun Interface Program (RIP).

Activating the timer

You activate the timer by pressing and holding the ▲ button while the gun are in live mode (the LED is red) until it emits 4 beeps (approximately 4 seconds) - the game timer will start counting down from the preset time when the trigger is pulled the first time after activating the timer. When the timer has counted down the preset length of time, the grip will emit short beeps until the timer is stopped or reset.

If the tickbox "Sound alert 60 sec. before game end" is enabled in the RIP software the grip will emit a beep 60 seconds before the specified time is up.

Stopping the alarm

You stop the alarm by pressing the ∇ button.

Stopping the timer

You stop the timer by putting the grip in safe mode.

Resetting the timer

You reset the timer by putting the grip in safe mode.

Controlling the Anti Chop Eye (ACE)

If your gun is equipped with an anti chop eye it is possible to enable and disable the use of the Eye from the grip keypad. When the gun is in live mode (red LED) press and hold the ▲ and ▼ buttons simultaneously until the grip beeps to toggle anti chop eye operation. One beep indicates that the anti chop eye is now enabled, 3 beeps indicates the Anti Chop Eye is disabled.

Controlling the LOAD time (LT)

It is possible to change the specified load time of you grip by using the keypad. The load time is the time that the grip keeps the bolt in the open position, allowing a ball to drop from the loader into the breech of the gun. The load time depends a lot on the hopper you use, current products on the market allows load times in the range of 10-40 milliseconds. When the gun is in safe mode (green LED) press and hold the \triangle button until the grip beeps three times – this sets the load time to 35 milliseconds (note the load time is set to 35 milliseconds every time this procedure is started). Using the \triangle and ∇ buttons you can now increase or decrease your load time in steps of 1 millisecond. The selected time is saved when the \bigcirc button is held for 2 seconds (grip beeps twice).

Lowering the load time of your gun will increase the rate of fire – finding the optimum settings for your gun is a trial and error process, try lowering the settings 2 milliseconds at the time until the gun start chopping then return to the last working settings. This function should not be used on guns fitted with the anti chop eye.

Battery

The battery is nickel metal-hydride (NiMH) and do not have any memory effect of NiCD batteries. You do not need to discharge it completely before recharging and frequent short time charging does not damage it. The battery are good for at least 15.000 shots on a charge - 40.000 shots per charge are not uncommon - under normal conditions, but capacity is affected by extreme cold or heat. Capacity will slowly decrease when the batteries are stored over long periods. A periodic recharge is recommended every 2 weeks or so. The included charger operates at 100-240V AC and 50-60Hz, only the pins for the wall socket are country specific. If you go abroad you only need a travel kit for the wall plug, not a transformer.

The battery must not become hotter than $+45^{\circ}$ C (113°F) or colder than -10° C (14°F). Capacity drops off rapidly outside these temperature limits and the batteries can be damaged and ultimately explode. Do not leave your grip in direct sunlight or extreme heat.

If you ever need to unplug the battery please use pliers to unplug the small plug – do not yank the wires.

Charging the batteries

Insert the charger into your mains (or auto 12V DC outlet if using the auto cable) and the data/charge plug into the female plug in the back of the grip. The charging will start, indicated by a slow red/green flashing of the LED. When the charging is complete only the green LED will flash. When you disconnect the charger, the grip will flash as if it's charging for 10-20 seconds before it detects the absence of the charger.

Use only the included charger for your grip. You can damage your batteries and electronics by using the wrong charger. The grip has its own charging circuits, protecting against overcharging, short circuiting etc. but only to a certain degree.