BURST WIZARD^{TM} KING KONG ELITE (BWKKE)   QUICK START   (PAGE 1)

MODE OF OPERATION	HOW TO SET UP YOUR BWKKE	RESULT
3-ROUND BURST & 0.6 SECOND RESUME FULL-AUTO	No setup is required. Preset by the factory. **Just connect your BWKKE in-line between the battery and your AEG. Wait 5 seconds for the dim light to turn on.**	Enjoy your new AEG gun with 3-round burst. Hold on to the trigger switch for 0.6 second to resume FULL-AUTO firing when needed.
DISABLE RESUME FULL-AUTO	**Immediately after battery is plugged into your BWKKE:** 1) **PULL & HOLD** the trigger for 2 seconds to see your BWKKE blink and hear the motor beep **2 TIMES**. 2) **KEEP HOLD ON TO** the trigger until BWKKE announces the battery voltage (Page 4 for voltage interpretation) 3) Wait 5 seconds for the dim light to turn on	BWKKE fires burst rounds only. Adjust burst count by using **COMMAND # 2 – SET BURST COUNT** below**.** **NOTE:** When FULL-AUTO is disabled, you can also use **PROCEDURE 1** on page 4 to change the burst counts while you are in the middle of playing your game.
ENABLE RESUME FULL-AUTO	Same as above, except BWKKE blinks and beeps **1 TIME** **(In other word, each time you pull & hold the trigger at power up until the battery voltage is announced, you are toggling the full-auto on/off option)**	BWKKE fires burst rounds and resumes to FULL-AUTO firing if the trigger is held. Adjust resume to FULL-AUTO delay by using **COMMAND # 3 – SET FULL-AUTO DELAY** below.
ENABLE ROF MODE FIRING	**Immediately after battery is plugged into your BWKKE:** 1) **PULL & HOLD** the trigger for 2 seconds to see and hear BWKKE blink and beep **1 or 2 TIMES**. 2) Release the trigger right away **(Before voltage announcement begins)** 3) Wait 5 seconds. **No dim light is on in ROF mode**	BWKKE fires at FULL-AUTO mode only with no burst control. Adjust ROF speed from 100% down to 40% by using **COMMAND # 5 – SET ROF %** below.
DISABLE ROF MODE FIRING	**Immediately after battery is plugged into your BWKKE:** 1) **PULL & HOLD** the trigger for 2 seconds to see and hear BWKKE blink and beep **3 TIMES**. 2) Release the trigger right away **(Before voltage announcement begins)** 3) Wait 5 seconds for the dim light to turn on	BWKKE fires in burst rounds mode again. **(NOTE:** If you just want to check your battery voltage without disabling ROF mode firing, after 1) on the left, just do not release the trigger until battery voltage announcement ends)

BURST WIZARD^{TM} KING KONG ELITE (BWKKE) COMMANDS

Below are **12** additional Commands for customizing your BWKKE. *To activate each command, PULL & RELEASE the trigger switch the number of times corresponding to the command # itself <u>within 5 seconds</u> after the battery is plugged into your BWKKE*
(ALWAYS REMOVE THE MAGAZINE FROM YOUR AEG WHEN SETTING UP YOUR BWKKE)

COMMAND #	COMMAND SET UP PROCEDURE *(DO NOT UNPLUG BATTERY TO BWKKE DURING SETUP)*
2 – SET BURST COUNT	1) BWKKE blinks 2 times **(NOTE: Only unplug battery at the end of each command. This one is after step 4)** 2) Pull & release the trigger the # of times that you want your NEW burst count to be (1 to 9) 3) BWKKE blinks for the # of times per your input 4) BWKKE blinks 3 QUICK times to tell you that it is the end of the command 5) Wait 5 seconds for the light to stay on at dim mode before firing your new burst rounds
3 - SET FULL-AUTO DELAY	1) BWKKE blinks 3 times 2) Pull & release the trigger the # of times of 0.2 second you want to add onto the FULL-AUTO delay 3) BWKKE blinks for the # of times per your input 4) BWKKE blinks 3 QUICK times to tell you that it is the end of the command 5) Wait 5 seconds for the light to stay on at dim mode before firing with your new delay (Note: for 0.2 second delay, pull & release 1 time. For 1 second delay, pull & release 5 times (5 x 0.2 second = 1 second). **TRICK FOR ADVANCED PLAYERS:** pull nothing at 2) above for a REAL FAST 0.1 second delay!)
4 – SET LIPO BATTERY	1) BWKKE blinks 4 times 2) Pull & release the trigger 1 time to allow LIPO protection status change (**No pulls or pulling 2 times means no change to the value stored. BWKKE blinks 2 times and go to step 6**) 3) BWKKE blinks 1 time 4) Pull & release the trigger 1 time to enable LIPO protection or 2 times to disable LIPO protection 5) BWKKE blinks 1 or 2 times depends on your input at 4) 6) BWKKE blinks 3 QUICK times to tell you that it is the end of the command 7) Wait 5 seconds for the light to stay on at dim mode before firing again. See page 4 for BWKKE's low volt responses.
5 – SET ROF %	1) BWKKE blinks 5 times 2) Pull & release the trigger 1 time to allow ROF % change (**No pulls or pulling 2 times means no change to the values stored. BWKKE blinks 2 times and go to step 9**) 3) BWKKE blinks 1 time to accept the change then follows by 4 times to request the input of the 10th digit # 4) Pull & release the trigger the 10th digit # of your new % (e.g. pull & release the trigger 9 times means 90%) 5) BWKKE blinks the # of times per your input above so that you know what you've just entered 6) BWKKE blinks 3 times to ask for the unit digit of your new % 7) Pull & release the trigger the unit digit # of your new % (e.g. pull & release the trigger 5 times means 5%) 8) BWKKE blinks the # of times per your input 9) BWKKE blinks 3 QUICK times to tell you that it is the end of the command 10) Wait 5 seconds before firing your new ROF % (The above example is for setting 95% ROF firing) **(Note: BWKKE light will not turn on at all during ROF mode operation) (Enter 99 equals to 100% ROF)**

COMMAND #	COMMAND SET UP PROCEDURE *(DO NOT UNPLUG BATTERY TO BWKKE DURING SETUP)*
6 – SET TAP BURST	1) BWKKE blinks 6 times 2) Pull & release the trigger 1 time to allow TAP burst mode firing (Hardwired mode only) (**No pulls or pulling 2 times means no change to the value stored. BWKKE blinks 2 times and go to step 6**) 3) BWKKE blinks 1 time 4) Pull & release the trigger 1 time to enable TAP burst or 2 times to disable it 5) BWKKE blinks 1 or 2 times depends on your input at 4) 6) BWKKE blinks 3 QUICK times to tell you that it is the end of the command 7) Wait 5 seconds for the light to stay on at dim mode before firing with your new option
7 – SET SENSITIVITY & SPRING ADVANCE	**Note**: For very fast ROF guns or AEG guns running with 11.1V LIPO battery where the burst count # may not be exactly as what you have set up for the BWKKE. If BWKKE fires 1 or less burst shot LESS THAN expected, select a number from 1 thru 9 to input to adjust the BWKKE. We recommend starting with a number like 5 first. If BWKKE fires 1 or more burst shot MORE THAN expected. Input a number from 11 thru 19 to adjust it. We recommend starting with a number like 14 first. **(You have up to 9 seconds to pull the trigger to input your #)** 1) BWKKE Blinks 7 times 2) Pull & release the trigger 1 time to enable sensitivity change option (**No pulls or pulling 2 times means no change to the value stored. BWKKE blinks 2 times and go to step 6**) 3) BWKKE blinks 1 time to tell you that you can enter your sensitivity value now 4) Pull & release the trigger the # of times for the sensitivity value that you want (**NO PULL MEANS RESET TO 0**) 5) BWKKE blinks the # of times per your input **6) THEN, BWKKE blinks 6 times to start the next subcommand sequence, which is for SPRING ADVANCE** 7) Pull & release the trigger 1 time to enable spring change option (**No pulls means no change. Blink twice, Go to 11**) 8) BWKKE blinks 1 time to tell you that you can enter your spring advance value now 9) Pull & release the trigger 1 time to enable SPRING ADVANCE or 2 times to disable (default from factory) 10) BWKKE blinks 1 or 2 times depends on your input at 9) 11) BWKKE blinks 3 QUICK times to tell you that it is the end of the command 12) Wait 5 seconds for the light to stay on at dim mode before firing with your new options **(Note: SPRING ADVANCE is for some AEG guns that the spring is not fully relaxed after burst mode firing. Or it has trouble to consistently finish a burst count of 1 (SEMI-AUTO). Normally, you don't need to set this at all. But together with sensitivity option, you can tailor your BWKKE to fire consistently on any guns)**
8– SET SNIPER DELAY	1) BWKKE blinks 8 times 2) Pull & release the trigger 1 time to allow sniper delay status change (**No pulls or pulling 2 times means no sniper delay. BWKKE blinks 2 times and go to step 6**) 3) BWKKE blinks 1 time 4) Pull & release the trigger the # of times of 0.2 second you want to add onto the sniper delay (**No pulls keeps the original value you have stored in the BWKKE before**) 5) BWKKE blinks for the # of times per your input or the value stored (e.g. 5 times means 1 second delay 0.2 x 5 = 1) 6) BWKKE blinks 3 QUICK times to tell you that it is the end of the command 7) Wait 5 seconds for the light to stay on at dim mode before firing again
9 - SET MAGAZINE CHANGE DELAY TIME & MAGAZINE CAPACITY	1) BWKKE blinks 9 times 2) Pull & release the trigger 1 time to allow magazine change delay setting (**No pulls or pulling 2 times means set magazine change delay time to 0. BWKKE blinks 2 times and go to step 12**) 3) BWKKE blinks 1 time 4) Pull & release the trigger the # of times of 1 second you want to add onto the magazine change delay time (**No pulls defaults to 1 second delay**) 5) BWKKE blinks for the # of times per your input 6) BWKKE blinks 8 times to accept the input of the 10th digit # for the magazine capacity 7) Pull & release the trigger the 10th digit # of your magazine capacity (e.g. pull & release the trigger 1 time means 10, 2 times means 20. No pulls means 00) 8) BWKKE blinks for the # of times per your input 9) BWKKE blinks 7 times to accept the input of the unit digit # for the magazine capacity 10) Pull & release the trigger the unit digit # of your magazine capacity (e.g. pull trigger 5 times means 5. No pulls = 1) 11) BWKKE blinks for the # of times per your input **(NOTE: The above steps allow you to set the magazine capacity from 1 to 99 rounds. If your burst count is 3, then the capacity of your cap can be set up to 99 x 3 = 297 BBs)** 12) BWKKE blinks 3 QUICK times to tell you that it is the end of the command 13) Wait 5 seconds for the light to stay on at dim mode before firing again
10 – SET PRECOCKING DELAY & BATTERY DECAY COMPENSATION TIME	1) BWKKE blinks 10 times 2) Pull & release the trigger 1 time to input the 10th digit # for the pre-cocking delay (**No pulls or pulling 2 times means no change to the value stored. BWKKE blinks 2 times and go to step 5**) 3) Pull & release the trigger the 10th digit # of your pre-cocking delay (e.g. pull & release the trigger 1 time means 10 milliseconds, 2 times means 20 milliseconds. No pulls means 00 milliseconds) 4) BWKKE blinks for the # of times per your input 5) BWKKE blinks 9 times 6) Pull & release the trigger 1 time to input the unit digit # for the pre-cocking delay (**No pulls or pulling 2 times means no change to the value stored. BWKKE blinks 2 times and go to step 9**) 7) Pull & release the trigger the unit digit # of your pre-cocking delay (e.g. pull & release the trigger 1 time means

COMMAND #	COMMAND SET UP PROCEDURE *(DO NOT UNPLUG BATTERY TO BWKKE DURING SETUP)*
10 – SET PRECOCKING DELAY & BATTERY DECAY COMPENSATION TIME **(CONTINUED)**	1 millisecond, 2 times means 2 milliseconds. No pulls means 0 millisecond) 8) BWKKE blinks for the # of times per your input **(NOTE: The above steps allow you to set the pre-cocking delay from 0 to 99 milliseconds)** 9) BWKKE blinks 8 times 10) Pull & release the trigger 1 time to input the unit digit # for the battery decay compensation time **(No pulls or pulling 2 times means no change to the value stored. BWKKE blinks 2 times and go to step 13)** 11) Pull & release the trigger the unit digit # of your battery decay compensation time (e.g. pull & release the trigger 5 times means adding 5 milliseconds to the delay per 0.2 Volt decay of the battery from its initial voltage when you first put the battery in. No pulls means = 0 i.e. no compensation at all) 12) BWKKE blinks for the # of times per your input (0 to 9 equivalent to 0 millisecond to 9 milliseconds) 13) BWKKE blinks 3 QUICK times to tell you that it is the end of the command 14) Wait 5 seconds for the light to stay on at dim mode before firing again
11 – TRAIN BWKKE TO FIRE YOUR OWN BURST TIMING	1) BWKKE blinks 11 times 2) Pull & release the trigger 1 time to allow you to train it with your own burst timing **(No pulls or pulling 2 times means no change to the timing value stored. BWKKE blinks 2 times and go to step 9)** 3) BWKKE blinks 1 time 4) Pull & release the trigger 1 time to start the training and 2 times or no pulls to remove the burst timing that you have entered before **(BWKKE restores firing using COMMAND # 2 counts, blinks two times and go to step 9)** 5) When you are ready, pull the trigger to fire the gun and release it when your desired burst counts (timing) have reached 6) When you are ready, pull & hold the trigger to replay the burst counts (timing) that you have just entered Release the trigger when the burst firing stops. 7) immediately pull & release the trigger 1 time to accept the new burst timing and BWKKE will go to step 9) 8) OR, pull & release the trigger 2 times to re-train BWKKE again if the replay burst timing is not what you expect BWKKE blinks 2 times and goes to step 4) 9) BWKKE blinks 3 QUICK times to tell you that it is the end of the command 10) Wait 5 seconds before firing your own burst counts **(Note: You can still use pre-cocking to further tune the BWKKE)** **(NOTE: Your own burst timing will be erased whenever you use COMMAND # 2 to set up the cycle-burst counts)**
12 – ANNOUNCE ROF OF YOUR AEG GUN	8) BWKKE blinks 12 times 9) When you are ready, PULL & HOLD the trigger until your AEG fires all 11 rounds 10) Continue to hold the trigger for the BWKKE blinks and beep out the ROF of your AEG 11) Your BWKKE will blink out the 10th digit of the ROF follows by the unit digit (e.g. 1 blink follows by 6 blinks means ROF is 16 rounds per second) 12) Release the trigger 13) BWKKE blinks 3 QUICK times to tell you that it is the end of the command 14) Wait 5 seconds for the light to stay on at dim mode before firing your AEG again
15 - RESET SETTINGS	1) BWKKE blinks 3 QUICK times and then turn on the dim light **(All settings are reset back to the factory values)**

COMMAND # 13 - REPORTS ALL THE USER'S SETTING STORED IN THE BURST WIZARD™ KING KONG ELITE

Use this command to verify all the settings that you have setup for your BWKKE, especially if BWKKE is not behaving the way you expect it! Also, you don't need to wait for the command to end, terminate it any time you are happy with the statuses that you want to see by just unplugging the battery.

# OF BLINKS	FOLLOWS BY LIGHT BLINKING PATTERNS: (IF FUNCTION IS ENABLED)	(IF FUNCTION DISABLED)
2 – BURST COUNT	**BWKKE blinks** out the # of the burst count (1 ~ 10 times or 25 times) (10 times means your own burst timing, 25 times when it was set up by PROCEDURE 1 on page 4 to fire 25 rounds)	
3 – FULLAUTO DELAY	**BWKKE blinks1 time** follows by the # of blinks (0.2 second added) to the FULL-AUTO delay	**BWKKE blinks 2 times**
4 – LIPO PROTECTION	**BWKKE blinks1 time**	**BWKKE blinks 2 times**
5 – ROF %	**BWKKE blinks1 time** follows by the 10th digit ROF % follows by the unit digit of ROF %	**BWKKE blinks 2 times**
6 – TAP BURST	**BWKKE blinks1 time** (For hardwired mode only to allow a tap of the trigger to finish the whole burst firing round without needing to hold on to the trigger all through the burst cycle firing)	**BWKKE blinks 2 times**
7 – SENSITIVITY	**BWKKE blinks1 time** follows by the # of the sensitivity value (value from 1 to 19)	**BWKKE blinks 2 times**
8 – SPRING ADVANCE	**BWKKE blinks1 time**	**BWKKE blinks 2 times**
9 – SNIPER DELAY	**BWKKE blinks1 time** follows by the # of blinks (0.2 second added) to the SNIPER delay	**BWKKE blinks 2 times**
10 – MAGAZINE CHANGE DELAY	**BWKKE blinks1 time** follows by the # of blinks (1 second added) to the MAGAZINE CHANGE delay	**BWKKE blinks 2 times**
11 – MAGAZINE CAPACITY	**BWKKE blinks1 time** follows by the 10th digit of the MAGAZINE CAPACITY follows by the unit digit	**BWKKE blinks 2 times**
12 – PRECOCKING DELAY	**BWKKE blinks 1 time** follows by the 10th digit of the PRE-COCKING delay in milliseconds follows by the unit digit of the PRE-COCKING delay in milliseconds	**BWKKE blinks 2 times**
13 – BATTERY DECAY COMPENSATION	**BWKKE blinks 1 time** follows by the unit digit of the BATTERY DECAY COMPENSATION in milliseconds	**BWKKE blinks 2 times**

2 TIMES OF DOUBLE BLINKING+ MOTOR BEEPING	LIPO LOW VOLTAGE WARNING AT(**12.4V FOR 14.8V, 9.4V FOR 11.1V AND 6.8V FOR 7.4V BATT**)
3 TIMES OF DOUBLE BLINKING +MOTOR BEEPING	LIPO LOW VOLTAGE GUN SHUT-OFF AT (**12.2V, 9.2V & 6.6V for above batteries respectively**)

You get the above warning once every 16th shots if the battery is in the low voltage warning zone and shut-off when shut off voltage is reached.

BATTERY VOLTAGE ANNOUNCMENT FROM YOUR BURST WIZARD[TM] KING KONG ELITE

Battery voltage is announced with long blinking interval (0.5 second) for unit volts, short blinking interval (0.25 second) for decimal volt.

For example, 9.6V is x x x x xxxxxx. The first blink always represents 6 volts, so 4 long blinks and 6 short blinks means 9.6V

PROCEDURE 1 – HOW TO MODIFY BURST COUNTS WHILE YOU ARE IN THE MIDDLE OF PLAYING YOUR GAME
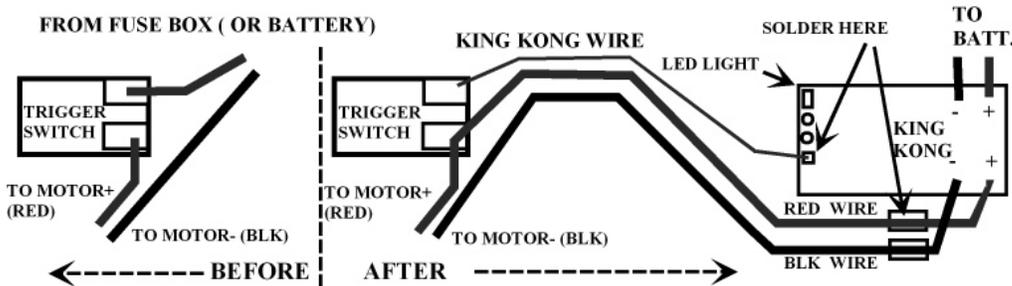
CONDITION: FULL-AUTO delay has been programmed to OFF (disabled) first (See DISABLE RESUME FULL-AUTO on page 1 for instruction)

Pull and hold on to the trigger switch after the last burst firing has completed. After 2 seconds, you will feel the motor beeping 2 times to warn you that you are about to change the burst count. If that is an unintended mistake, just release the trigger within 1 second and nothing will be changed. Otherwise, the motor will beep 2 more times. Now release the trigger. Within 5 seconds, pull and release the trigger the number of times between 1 to 9 counts that you want the new burst count to be and **hold on to the trigger on the last pull**. (E.g. for a 3-round burst, hold on to the trigger on the 3rd pull) The motor will beep 2 times to acknowledge that the new burst counts have successfully been entered. Now, release the trigger and fire your new burst counts until you want to change it again. If you want to simulate FULL-AUTO in this mode, pull & release the trigger 10 times in above procedure, your Burst Wizard King Kong will then fire 25 rounds before it will stop. Of course, your gun will stop firing whenever you release the trigger switch. **(Note: If you unplug the battery to your BWKKE, the burst count will still be at 25 the next time you use your BWKK again. So, nothing is wrong with your BWKKE when it seems to fire continuously! You can use the above procedure or command # 2 to change it back to another low burst counts)**

INSTRUCTION TO HARDWIRE YOUR BWKKE INTO YOUR BELOVED AEG

Ultimately, some users prefer to use the King Kong in the trigger switch by-pass wire-in hardwired fashion. They will find that it is relatively simple to wire-in the Burst Wizard King Kong with minimum modification of your trigger switch: Just de-solder the wire from the top side of the trigger switch to be shorted to the lower side of the trigger switch to establish permanent connection from the Burst Wizard King Kong's MOSFET to the motor as shown in the following diagram. Then route in the supplied ONE ONLY extra wire from the outside to be soldered to the now unoccupied top side of the trigger switch on one end and onto the square pad at the front of the Burst Wizard King Kong on the other.

Connect the battery to the Burst Wizard King Kong exactly like it is in the Plug-And-Play mode and connect (or solder & shrink tubed) the other pair to the AEG side with modified trigger switch. Now, expect an increase in ROF with natural Active Braking and complete trigger switch protection features!

IMPORTANT: For your BWKKE to know that it is operating in the hardwired mode, it must have the AEG side cable connected to it first before the battery can be plugged into It as shown in the figure. Otherwise, your BWKKE may not fire or fire at full-auto without stopping!

TRICK: TO DO MORE THAN ONE COMMAND WITHOUT NEEDING TO UNPLUG AND PLUG THE BATTERY BACK TO THE BWKKE FOR EACH COMMAND

When you see the 3 QUICK blinks at the end of each command execution and before the dim light is turned on (in 3 seconds), you can pull the trigger to execute the same or another command again. Also good for toggling resume full-auto on/off state after switching back from ROF mode to burst mode and it is not what you expect. To repeat, at one power up, all commands can be done multiple times until you are satisfied with all your settings!

BURST WIZARD KING KONG ELITE FEATURES:

1) **CYCLE-GEAR BURST TECHNOLOGY** – Not time based. Insensitive to battery type, voltage, gear & motor, spring variations
2) **NATURAL ACTIVE BRAKING** – Very effective and easy on your motor and electrical system
3) **DIGITAL TECHNOLOGY** – For an easy trigger switch based user's interface to control all the functions of the BW King Kong
4) **LIPO PROTECTION** – Precise low voltage warning and shut off. Automatic identification of 14.8V, 11.1V and 7.4V batteries
5) **DUAL OPERATING MODES** – plug-n-play and trigger switch bypass hardwired are supported
6) **TAP BURST** – in hardwired, allow you to release trigger switch before burst count finishes to still complete the burst round
7) **TRAIN BWKKE OF YOUR OWN BURST COUNTS** – BWKKE is completely flexible when it comes to your burst firing needs
8) **PEPORT ROF OF YOUR AEG** – Now you can easily know the exact rate of fire from your AEG (# OF FIRES PER SECOND)
9) **OTHER SPECIAL FEATURES** – soft start, resume full-auto, sniper, ROF, magazine change delay and trigger switch arcing reduction

WARNING: BWKKE DOES NOT REPLACE YOUR AEG FUSE. FOR SAFETY, DON'T REMOVE IT FROM YOUR AEG!