QUICK START BURST WIZARD[™] 3 MULTI-BURST (BW3) - MILSIM MOSFET - <u>CE & RoHS CERTIFIED</u> (PAGE 1)

MODE OF OPERATION	HOW TO SET UP YOUR BW3	RESULT	
3-ROUND BURST & 0.6	No setup is required. Just connect your BW3 in-line	Enjoy your BRAND NEW AEG with 3-round burst. Hold	
SECOND RESUME FULL-AUTO	between battery and your AEG. Then wait 4 sec to play	the trigger 0.6 sec after burst firing to resume fullauto.	
SET UP BW3 TO FIRE:	*If you use LIPO, use CMD # 4 to enable protection first*	Once calibrated, your AEG will fire perfectly unless you	
PERFECT 1-ROUND BURST	If your AEG fires 1 or ½ a shot LESS: CMD # 7. Press 1 to	change the gearbox internal or use a different battery	
(Run command # 2 to set	allow input, press 4 to set to 4 and wait for 3 quick blinks.	type: Like from NIMH to LIPO or LIPO to NIMH etc.	
burst cnt = 1. If not perfect,	(If 4 is not perfect yet, re-input: 1 to 9 for it to fire perfect)	Advanced users: Always calibrate your AEG to fire	
Run cmd # 7 to calibrate AEG	If your AEG fires 1 or ½ a shot MORE: CMD # 7. Press 1 to	exactly 1-round burst first by using CMD # 2 & 7. Then	
	allow input, press 14 to set to 14 and wait for 3 quick blinks.	run CMD # 5 to get perfect cycle-gear ROF reduction!	
as explained on the right)	(If 14 is not perfect, re-input: 11 to 19 for it to fire perfect)		
DISABLE RESUME FULL-AUTO	Immediately after battery is plugged to your BW3: BW3 fires burst rounds only (No resume fullauto!		
pull & NIZA	 PULL & HOLD the trigger for 2 seconds to see your 	Adjust burst count by using COMMAND # 2 – SET	
pull & 1/2	BW3 blink and hear the motor beep 2 TIMES .	BURST COUNT.	
X=batt	2) KEEP HOLD ON TO the trigger until BW3 announces	NOTE: With resume FULL-AUTO disabled, you can	
voltage X	the battery voltage (Page 4 for voltage interpretation)	toggle between SEMI (1-burst) & current burst count	
	3) Release & wait 4 seconds for the dim light to turn on	by holding the trigger for 1.2 seconds after firing ends.	
ENABLE RESUME FULL-AUTO	Same as above, except BW3 blinks and beeps 1 TIME	BW3 fires burst rounds. Resume to FULL-AUTO firing if	
hold	(In other word, each time you pull & hold the trigger	the trigger is held. Adjust NOTE: resume FULL-AUTO delay means LED	
	at power up until the battery voltage beeps out to		
X=batt +	you, you are toggling resume full-auto on/off option)	by using command # 3 below. blinks 1 time	
ENABLE PWM ROF FIRING	Immediately after battery is plugged into your BW3:	BW3 fires at FULL-AUTO mode only with no burst	
pull & 🔨 🔨 🗸	1) PULL & HOLD the trigger for 2 seconds to see and hear	control. But you still get the benefit of MOSFET's soft	
hold 2 sec $(1, 2)$	BW3 blink and beep 1 or 2 TIMES.	start and trigger switch protection! With BW3, you can	
	2) Release the trigger right away (You have 1 second to	also adjust PWM mode ROF speed from 100% down to	
release trigger	release before voltage announcement begins)	25% by using: COMMAND # 5 – SET PWM ROF %	
release trigger	3) Wait 4 seconds. No dim light is on in PWM ROF mode	(Setting ROF % less than 50 % may stop or stall AEG!)	
DISABLE PWM ROF FIRING	Immediately after battery is plugged into your BW3:	BW3 fires in burst rounds mode again.	
pull & 🔺 🔨	1) PULL & HOLD the trigger for 2 seconds to see and hear	NOTE1: USE CMD # 15 TO RESET BW 3 TO FACTORY	
hold 2 sec 3	BW3 blink and beep 3 TIMES .	SETTING IF IT DOESN'T WORK PROPERLY.	
release trigger	2) Release the trigger right away (You have 1 second to	NOTE2: SEE TRICK4 IF AEG FIRES BURST ROUND	
	release). Wait 4 seconds for the dim light to turn on	AGAIN AND AGAIN WITHOUT STOPPING.	

--- (BW3) BURST WIZARD[™] 3 MULTI-BURST 100% MILSIM MOSFET COMMANDS ---

To activate a command, PULL & RELEASE trigger the # of times equal to the command # within 4 seconds after battery is plugged in (IMPORTANT!! FOR EVERYONE'S SAFETY, ALWAYS WEAR GOGGLE & REMOVE THE MAGAZINE FROM YOUR AEG WHEN SETTING UP YOUR BW3)

COMMAND #		COMMAND SET UP PROCEDURE (NOTE: DO NOT UNPLUG BATTERY TO BW3 DURING SETUP)		
2 – SET BURST COUNT	1)	BW3 blinks 2 times (NOTE: If needed, only unplug battery at the end of each command. This one is after step 4)		
→ pull X	2)	Pull & release the trigger the # of times that you want your NEW burst count to be (0 to 9)		
	3)	BW3 blinks the # of times per your input (0 means no burst firing. Good for fullauto only MILSIM see CMD # 3)		
	4)	BW3 blinks 3 QUICK times to tell you that it has saved your setting & ended command NOTE: means LED		
$\langle x \rangle$	5)	Wait 4 seconds for the light to stay on at dim mode before firing your new burst rounds blinks 2 times 2		
3 - SET RESUME	1)	BW3 blinks 3 times		
FULL-AUTO DELAY	2)	Pull & release the trigger the # of times of 0.1 second you want to add onto the resume FULL-AUTO delay		
	3)	BW3 blinks for the # of times per your input. Then BW3 blinks 3 QUICK times to save your setting		
3 \rightarrow pull X	4)	Wait 4 seconds for the light to come on at dim mode before firing with your new delay		
<u>\\</u>		(Note: for 0.1 second delay, pull & release 1 time. For 1 second delay, pull & release 10 times (10 x 0.1 = 1 second).		
$\langle x \rangle$		TRICK FOR MILSIM PLAYERS: pull nothing at 2) for 0 sec. delay. If CMD # 2 count = 0, then you have fullauto only!		
4 – SET LIPO OR LiFePO4	1)	BW3 blinks 4 times (For BW 3 to fire burst rounds count accurately with 11.1V LIPO, enable LIPO protection first !)		
	2)	Pull & release the trigger 1 time to allow LIPO or LiFePO4 protection status change (No pulls or pulling 2 times		
4 \rightarrow pull 1		means no change to the value stored. BW3 blinks 2 times and go to step 6)		
	3)	BW3 blinks 1 time		
$\bigcirc 1$	4)	Don't pull until timeout DISABLE protection. Pull trigger 1 time to enable LIPO, 2 times to enable LiFePO4 protect		
pull 0,1 or 2	5)	BW3 blinks 0, 1 or 2 time depend on your input at step 4. See TRICK4 on page 4 why using 4, 5 or 6 as input instead		
	6)	BW3 blinks 3 QUICK times to tell you that it has saved your setting & ended the command		
0,1,2	7)	Wait 4 seconds for the light to stay on at dim mode before firing again. See page 4 for BW3's low volt responses.		
5 – SET ROF	1)	BW3 blinks 5 times (BW3 supports PWM type ROF reduction & MILSIM 100 % full speed cycle-gear ROF reduction)		
(Fullauto only. For slow	2)	Pull & release the trigger 1 ~ 15 times for Cycle-Gear ROF reduction mode or 16 times for PWM ROF % change (No		
down BURST, see CMD 6)		pulls until timeout means disable both PWM & full speed CYCLE-GEAR ROF reduction modes. BW3 goes to step 8)		
,	3)	Pull 5 adds 5x0.005 = .025 sec in bet. Firing. BW3 goes to step 8. PLEASE tune 1 burst perfect first. See QUICK START		
		BW3 gives you realistic ROF of the real steel with FULL SPEED gear cycling! A 0.005 sec pause reduce 25 ROF to 22		
	4)	PWM: BW3 blinks 16 times . Pull the trigger # of times for the 10 th digit # X of your new % (e.g. pull 9 times for 90%)		
pull X	5)	BW3 blinks the # of times per your input above so that you know what you've just entered		
	6)	Pull the trigger the # of times for the unit digit # Y of your new % (e.g. pull 5 times means 5%)		
	7)	BW3 blinks the # of times per your input (Note: Minimum PWM ROF % allowed = 40%)		
pull Y	8)	BW3 blinks 3 QUICK times to save your setting & ended the command (Note: Enter 99 equals to 100% ROF)		
	9)	Wait 4 seconds before firing your new ROF % (The above example is for setting 95% ROF firing) (Note: LED NOT LIT)		

COMMAND #	COMMAND SET UP PROCEDURE (DO NOT UNPLUG BATTERY TO BW3 DURING SETUP)
6 – MULTIPLE BURST	 BW3 blinks 6 times *** (NOTE: The 1st burst round is always set by using COMMAND # 2) *** Pull the trigger 1 time to allow multiple burst rounds to be input (No pulls or pulling 2 times means disable the
pull 1	 Pull the trigger 1 time to allow multiple burst rounds to be input (No pulls or pulling 2 times means disable the multiple burst capability (BW3 resumes to 1 x-round burst from CMD # 2. BW3 blinks 2 times and go to step 7)
	3) BW3 blinks 1 time. Pull trigger W times for delay of w x 0.015 sec between burst round (w=5: $5 \times 0.015 = 0.075$ sec)
	 4) BW3 blinks w times. Pull trigger Y times to set up the burst count of 2nd burst round (e.g. Y=3 means 3 round burst)
	5) BW3 blinks y times. Pull trigger Z times to set up the burst count of 3 nd burst round (e.g. Z=2 means 2 round burst)
	 BW3 blinks Z times (NOTE: If you didn't pull the trigger at 5 for Z, you would get 2 rounds of burst firing instead!)
	7) BW3 blinks 3 QUICK times to tell you it has saved your setting (Set to 1-1-1 for MILSIM slowdown 3-round Burst)
	8) Wait 4 seconds for BW3 to fire again (Now you can fire 3-2-1, 3-3-3, 1-1-1, 3-3, 3-2, 3-1, 1-1 multi-burst rounds)
7 – SET SENSITIVITY	Note: For very fast ROF AEGs or AEGs running with 11.1V LIPO battery where the burst count # may not be exactly
&	at what you have set up the BW3 for. If BW3 fires 1 or a fraction of a burst shot LESS THAN expected, select a
	number from 1 thru 9 to input to adjust the BW3. We recommend starting with a number like 4 first.
SPRING ADVANCE	If BW3 fires 1 or a fraction of 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 ONLY up to 9 seconds to finish the trigger pulls)
	1) BW3 Blinks 7 times
NIC spull 1	 Pull & release the trigger 1 time to enable sensitivity change option (No pulls or pulling 2 times means no change to the value stored. BW3 blinks 2 times and go to step 6)
$\bigcirc 7 \bigcirc 1$	3) BW3 blinks1 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)
	 blinks the # per your input (IF YOU DIDN'T INPUT AT 4), WAIT FOR ONE QUICK BLINK FIRST BEFORE STEP 6)
	6) SPRING ADVANCE Pull & release the trigger 1 time to enable SPRING ADVANCE or no pulls or 2 times to disable
pull X 🗧	 7) BW3 blinks 0, 1 or 2 times depends on your input at 6)
	8) BW3 blinks 3 QUICK times to tell you that it has saved your setting & ended the command
\mathbf{X}	9) Wait 4 seconds for the light to stay on at dim mode before firing with your new options
1 1	(Note: SPRING ADVANCE is for some AEGs that the spring is not fully relaxed after burst mode firing. Normally, you
pull 1 or 2	don't need to set this at all. But together with sensitivity setting & cmd #10 your BW3 will fire consistently on any
	AEGs) BW3 STORES A SENSITIVITY VALUE FOR 1-ROUND & X-ROUND BURST INDEPENDENTLY! If needed, tune
(1,2)	sensitivity for both! Use CMD # 2 to set up 1-round burst and tune by CMD #7, then 3-round burst to tune again.
8– SET SNIPER DELAY	NOTE: If your AEG still doesn't complete a full cycle once in a while, use command # 10 to add some time to it !
8- SET SNIPER DELAY	 BW3 blinks 8 times (NOTE: sniper delay is a MILSIM feature forcing a programmable fixed delay after a shot) Pull & release the trigger 1 time to allow sniper delay status change (No pulls means no sniper delay. BW3 waits for
VI/ pull 1	about 14 seconds and times out and go to step 6)
	3) BW3 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 or pull 2
	times means disable sniper delay function)
pull X	5) BW3 blinks for the # of times per your input of the value (e.g. 5 times means 1 second delay 0.2 x 5 = 1 sec)
X X	6) BW3 blinks 3 QUICK times to tell you that it has saved your setting & ended the command
	7) Wait 4 seconds for the light to stay on at dim mode before firing again
9 -SET MAGAZINE	1) BW3 blinks 9 times (NOTE: A MILSIM feature emulating a fixed delay in switching magazine after x BBs)
CHANGE DELAY TIME &	2) Pull & release the trigger 1 time to allow magazine change delay setting (No pulls or pulling 2 times means set
MAGAZINE CAPACITY	 magazine change delay time to 0 and disable the function. BW3 blinks 2 times and go to step 10) BW3 blinks 1 time. Then Pull the trigger the # of times of W seconds you want to add onto the magazine change
	 BW3 blinks 1 time. Then Pull the trigger the # of times of W seconds you want to add onto the magazine change delay time. Valid inputs are 1 ~ 15 seconds. (No pull means disable the function)
	 BW3 blinks for # of times per your input. (NOTE: 16 means delay forever. See page 4 for info to add a reset switch)
	 5) MAGAZINE CAPACITY: Pull trigger for 100th digit # X of the capacity (1 pull = 100, 25 = 2500. No pulls = 0000)
	 BW3 blinks the # of your input (IF YOU DIDN'T ENTER 100TH DIGIT, WAIT FOR 1 QUICK BLINK FIRST BEFORE STEP 7)
Ŵ	 Pull trigger for 10th digit # Y of the capacity (1 pull = 10, 2 pulls = 20. No pulls means 00). BW3 blinks back your # Y.
pull X	8) Pull the trigger the unit digit # Z of your magazine capacity (e.g. pull trigger 5 times means 5. No pulls = 0)
	9) BW3 blinks for the # of times per your input (If input=20 for 100 th digit, 5 for 10 th and 0 for unit, then BB = 2050)
pull Y	(NOTE: The above steps allow you to set the magazine capacity from minimum of 1 to maximum of 3000 BBs !)
Č.	10) BW3 blinks 3 QUICK times to tell you that it has saved your setting & ended the command. Wait for dim light on
pull Z	BW3 offers the most realistic and accurate BB counts! It works for partial burst count, full burst count and even
	during resume fullauto firing if you have used cmd #5 to enable full power ROF reduction mode first. ENJOY the
	most realistic firing to emulate real steel with BB count! BW 3 also beeps 4 quick times when BB count is down to 0
10 – SET PRECOCKING &	1) BW3 blinks 10 times (Precocking can also be used to set the spring to its most relaxed position for some AEGs)
BATT DECAY TIME	 Pull & release the trigger 1 time to enable input of the 10th digit # for the pre-cocking delay (No pulls or pulling 2 times means no change to the value stored. BW3 blinks 2 times and go to step 10)
To TOGGLE precocking	 BW3 blinks 1 time. Now, pull & release the trigger the 10th digit # X of your pre-cocking delay (e.g. pull & release the
on / off, pull trigger	trigger 1 time means 10 milliseconds, 2 times means 20 milliseconds. No pulls means 00 milliseconds)
ONCE at power up.	 BW3 blinks the # per your input (IF YOU DIDN'T INPUT 10TH DIGIT, WAIT FOR 1 QUICK BLINK FIRST BEFORE STEP 5)
Wait 7 sec. See 1 blink	5) Pull & release trigger the unit digit # Y of pre-cocking delay (e.g. pull & release the trigger 1 time means 1
+ 3 quick blinks: means	millisecond, 2 times means 2 milliseconds. No pulls means 0 millisecond)
disabled; Next time see	6) BW3 blinks the # of your input (IF YOU DIDN'T INPUT UNIT DIGIT, WAIT FOR 1 QUICK BLINK FIRST BEFORE STEP 8)
3 quick blinks: means	(NOTE: The above steps allow you to set the pre-cocking delay from 0 to 99 milliseconds)
precocking re-enabled.	7) BATT. DECAY COMPENSATION NOTE: To clear precocking time=0, do not enter anything at 3) and5)
P	

(PAGE 2)

(PAGE 3)

COMMAND #	COMMAND SET UP PROCEDURE (DO NOT UNPLUG BATTERY TO BW3 DURING SETUP)
→ pull 1	8) Pull & release the trigger the unit digit # Z of your battery decay compensation time (e.g. pull & release the trigger 2
	times means adding 2 milliseconds to the delay per 0.2 Volt decay of the battery from its initial voltage when you
	first plug the battery in. No pulls means = 0 i.e. no compensation at all)
Pull Y	9) BW3 blinks for the # of times per your input (0 to 9 equivalent to 0 millisecond to 9 milliseconds)
	10) BW3 blinks 3 QUICK times to tell you that it has saved your setting & ended the command
	11) Wait 4 sec before firing again NOTE: If you want battery decay compensation only, still set precocking to 1ms first!
11 – TRAIN TO FIRE BURST	Use this to set burst cnt to exactly 1 or any specific timing for any AEG if CMD # 2 not perfect!
11 > pull 1	1) BW3 blinks 11 times
	2) Pull & release trigger 1 time to train it (Pull 2 times to clear timing value stored. It blinks 2 times and go to step 12)
	3) BW3 blinks 1 time
pull X= 0,1, 2 or 3	4) Pull & release the trigger 1 time to start from fresh timing. 2 times to adjust the previous stored timing in 30
N1/1 N1/1 N1/1	millisecond steps and 3 to adjust the stored timing in 3 millisecond steps. No pulls allows you to replay last stored
	timing! BW 3 will blink twice in 3 seconds & go to step 9 to replay)
start from 0 🖌 each pull add	5) (If step 4 is 1) Pull Y times to input new timing (If step 4 is 2 or 3) adjust the timing to the previously stored timing.
each pull add 3 ms	6) If Y is <= 10, then Y adds to the stored timing. If Y is > 10, then value from (Y-10) subtracts from the stored timing.
30 ms	7) For example: Y= 3 and # of pulls in step 4) is 1 or 2, then it means add 90 ms to the stored timing (3x30=90 ms)
Y=# of pull	8) For example: Y= 12 and # of pulls in step 4) above is 3, then it means subtract 6 ms from the stored timing (Here is
pull to replay timing	how it works: (Y-10) that is 12-10 = 2. So, 2 x 3ms = 6ms. Since Y >10 so the stored timing is subtracted by 6 ms).
pull to replay timing	9) When you are ready pull and hold the trigger to play out the stored burst timing to check if it is right.
pull 0, 1 or 2	10) Release and pull the trigger again to confirm the burst timing one more time.
	11) If the timing is right, pull the trigger 1 time to save. No pull or pull 2 times will go back to 4) to adjust more again!
save &	12) BW3 blinks 3 QUICK times to tell you that it has saved your setting & ended the command
done 2	13) Wait 4 seconds before firing your own burst counts (Note: Multi-Burst will fire 3 identical Burst from your timing!)
	(NOTE: Your own burst timing will be erased whenever you use COMMAND # 2 to set up the burst cycle counts)
12 – ANNOUNCE ROF OF	1) BW3 blinks 12 times (With BW3, you know what the ROF of your AEG is without needing a chronograph!)
YOUR AEG	2) When you are ready, PULL & HOLD the trigger until your AEG fires all 11 rounds for ROF measurement
12 \rightarrow pull & hold	3) Continue to hold the trigger for the BW3 to blink and beep out the ROF of your AEG
	4) Your BW3 will blink out the 10 th digit of the ROF follows by the unit digit (e.g. 1 blink follows by 6 blinks means ROF
AEG fires 11 shots	is 16 rounds per second. If it just blinks 8 times without a break, then the ROF is 8 rounds per second)
+	5) Release the trigger now! BW3 blinks 3 QUICK times to tell you that it has saved your setting & ended the command
	6) Wait 4 seconds for the light to stay on at dim mode before firing your AEG again
× Y	To get accurate ROF result, you may need to tune the AEG fire exact 3-rnd burst perfectly first using CMD # 2 & 7
14–SET TAP BURST / FUSE	1) BW3 blinks 14 times (When tap burst is on, DO NOT select SEMI! It will fire burst & may DAMAGE the cutoff level)
NI/ pull 1	2) Pull & release the trigger 1 time to allow Hardwired mode only TAP burst mode firing (No pulls or pulling 2 times
	means no change to the value stored. BW3 blinks 2 times and go to step 6)
	3) BW3 blinks 1 time (BW3 allows additional inputs as shown in BOLD here)
	4) Pull & release the trigger 1 time to enable TAP burst or 0 time to disable it (<i>pull 4 if BW3 fuse false trips easily</i>)
pull 1 or 2	5) BW3 blinks 1 or 2 times depend on your input (pull 5 if BW3 fuse false trips + enable TAP burst)
1.2	6) BW3 blinks 3 QUICK times to tell you that it has saved your setting (pull 8 to disable fuse & motor protect)
·····	7) Wait 4 secs for the light to stay on at dim mode (pull 9: No fuse & motor protect function but enable TAP burst)
15 - RESET SETTINGS	1) BW3 blinks 3 QUICK times and then the dim light is on in 4 secs (All settings are reset back to the factory values)

COMMAND # 13 - REPORTS ALL THE USER'S SETTING STORED IN THE BURST WIZARD[™] 3 MULTI-BURST

Use this command to verify all the settings in your BW3, especially if BW3 is not behaving the way you expect it!

## OF BLINKS	FOLLOWS BY LIGHT BLINKING PATTERNS: (IF FUNCTION IS ENABLED)	(IF FUNCTION DISABLED)
2 – BURST COUNT	BW3 blinks out # of the burst count (0 ~ 10 times) (10 times means your own burst timing)	
3 – FULLAUTO DELAY	BW3 blinks 1 time follows by the # of blinks (0.1 second added) to the FULL-AUTO delay	BW3 blinks 2 times
4 – LIPO PROTECTION	BW3 blinks 1 time follows by 1 blink for LIPO. Or 2 blinks for LIFE battery protection	BW3 blinks 2 times
5 – ROF %	BW3 blinks 1 time follows by Cycle-gear ROF delay #, follows by the 10 th digit of PWM ROF %	BW3 blinks 2 times
	follows by the unit digit of PWM ROF %	
6 – MULTIPLE BURST	BW3 blinks 1 time follows X blinks of burst delay, follows Y blinks 2 nd & Z blinks 3 rd burst cnt	BW3 blinks 2 times
7 – SENSITIVITY	BW3 blinks 1 time follows by the # of the sensitivity value (value from 1 to 19)	BW3 blinks 2 times
8 – SPRING ADVANCE	BW3 blinks 1 time follows by 1 blink	BW3 blinks 2 times
9 – SNIPER DELAY	BW3 blinks 1 time follows by the # of blinks (0.2 second added) to the SNIPER delay	BW3 blinks 2 times
10-MAG. CHGE DELAY	BW3 blinks 1 time follows by # of blinks of # of seconds added to MAGAZINE CHANGE delay	BW3 blinks 2 times
11 – MAGAZINE CAP.	BW3 blinks out 100 th digit, follows by 10 th digit and follows by the unit digit of the capacity	
12 – PRECOCKING	BW3 blinks 1 time follows by the 10 th digit of the PRE-COCKING delay in milliseconds followed	BW3 blinks 2 times
DELAY	by the unit digit of the PRE-COCKING delay in milliseconds	
13 – BATTERY DECAY	BW3 blinks 1 time follows by the unit digit of the BATTERY DECAY COMPENSATION in millisec	BW3 blinks 2 times
14 – TAP BURST	BW3 blinks 1 time follows by 1, 5 or 9 blinks to enable TAP. (For hardwired mode only)	BW3 blinks 2 times, or 1
	BW3 blinks 4 or 5 increases power sense rating 2x before tripping. 8 or 9 means no protect	blink follows by 4 or 8

LIPO & LIFePO4 LOW VOLTAGE WARNING & SHUT OFF BLINKING PATTERN (WHEN ENABLED BY COMMAND # 4)

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

2 TIMES OF DOUBLE BLINKING+ MOTOR BEEPING	LOW VOLTAGE	LIPO (12.4V FOR 14.8V, 9.4V FOR 11.1V AND 6.8V FOR 7.4V BATTERY)
	WARNING:	LiFePO4 (14.2V FOR 16.5V, 11.4V FOR 13.2V AND 8.6V FOR 9.9V BATTERY)
3 TIMES OF DOUBLE BLINKING +MOTOR BEEPING	LOW VOLTAGE	LIPO (12.2V, 9.2V & 6.6V for the above batteries respectively)
	AEG SHUT-OFF:	LiFePO4 (14.0V, 11.2V & 8.4V for the above batteries respectively)
TNA		

BATTERY VOLTAGE ANNOUNCMENT FROM YOUR BURST WIZARD[™] 3 MULTI-BURST

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 mean 9.6V.

PROCEDURE 1 - TOGGLE BETWEEN SEMI AND CURRENT BURST COUNT DURING A GAME (Resume fullauto is off)

Pull & hold on to the trigger after last burst firing has ended. After 1.2 seconds, the motor shakes 2 times to signal you that you have toggled the burst count. If you were at 3-rnd burst, it would be toggled to semi (1-round burst). Doing it next time will toggle it back to 3-rnd burst count. If Multi-Burst is on, only FOR the 1st burst. Now at full-auto tappet plate position, you are given a choice to fire your AEG either in x-round burst or semi !

PROCEDURE 2 – NEW COMMAND 6 : MULTIPLE BURST SETUP AND USAGE (Slowdown 3-round burst is: 1-1-1)

Congratulations! Your BW 3 has just transformed your AEG into the most amazing shooting machine. You can now fire not just 1 round of burst firing with one pull of the trigger but up to 3! The delay between burst round is settable in increment of **0.015 second**. Now, you have so many different ways to fire your AEG to really give you the upper edge and make people think that you have a super gun! **It is cool to setup a 1-1-1 shot with 0.03 seconds in between to really hit your target crisp and emulate actual gun speed and save BBs**. Or a 3-3-3 to lure them out with the 1st burst and hit them with the 2nd and 3rd round burst in lightning fast trigger response than pulling the trigger 3 times! Unlike fullauto where you just spray the bullets all over the place, MULTI-BURST allows you 3 aim-hit, aim-hit and aim-hit with realistic like super gun result and saves you a lot of BBs during a game.

PROCEDURE 3 – NEW COMMAND 5: 100% BATT PWR ROF REDUCTION SETUP AND USE (Fullauto only not Burst)

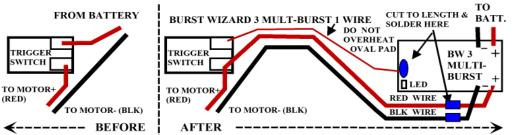
BW3 gives you the most realistic emulation of real steel fullauto firing speed of $15 \sim 20$ bullets per sec. To do that, run CMD #5 to set pause time first (enter 1 to 15 for delay of 0.005 sec increment). BW3 fires at 100% battery power per bullet with quickest trigger response possible but allows you to set pause time in between to reduce the overall ROF! The result is smoothest real gun like firing experience that you had dreamed for! Now it is a reality to fire like a real gun with no loss of trigger response. To fire slowdown 3-rnd burst, set <u>PROC 2</u>. Reducing ROF allows gearbox last much longer!

PROCEDURE 4 – SETUP FOR MILSIM PLAYER TO FIRE FULLAUTO ROF REDUCTION WITH MAG. CAPACITY COUNT

(1)-CMD #2 set burst count =1. (2)-If you run your AEG with 11.1V lipo, use CMD #4 to enable LIPO protection now. (3)-If needed CMD #7 to tune it fire exact 1 burst. (4)-CMD # 5, enter 1 for CYCLE-GEAR fullauto ROF reduction by 0.005 sec (you can enter 1 to 15). (5)-CMD # 9, if wanted, set magazine delay time and capacity count. (6)-CMD #9, if input is 16, then delay = forever. **Plug-n-play only**, you need to implement a switch wired to the **Oval Pad** to reset the count and allow your gun to fire again (One side of the switch to OVAL PAD, the other to battery+. **(7)- If wanted, CMD # 2 & 6 to set burst to: 1-1-1 for real steel ROF reduction 3-rnd burst!** (8) To run fulllauto only with no burst, set CMD#2 and #3 to 0 and use CMD #5 to set cycle gear ROF.

INSTRUCTION TO HARDWIRE YOUR BW3 INTO YOUR AEG (You Need soldering skill and low temp. solder iron !!)

Ultimately, many of you want to hardwire BW3 to 100 % protect the trigger switch & with quicker response! It is pretty simple to wire-in the BW3 with minimum modification to your trigger switch: Just de-solder the wire from the top side of the trigger switch to be soldered & shorted to the lower side of the switch to establish permanent connection from the BW3 MOSFET to the motor as shown in the following diagram. Then route the supplied ONE ONLY extra wire and solder it to unoccupied top side of the switch and <u>CAREFULLY</u> onto the <u>BW 3 Oval Pad</u> (USE GOOD SOLDER IRON! DON'T OVER HEAT PAD PLEASE) Cut out connector, solder & shrink wrapped the AEG side BW3 cable to your AEG. Finally, connect battery to your BW3 exactly like in the Plug-And-Play mode. If your gearbox version doesn't have the + wire from battery power as shown, you have to route one to switch by tapping off from the battery + wire. Now, expect increase ROF with natural Active Braking, quick trigger switch response & 100 % switch protection features! YOU CAN REMOVE & PUT BW3 AT THE SAME FUSE BOX LOCATION IF SPACE IS TIGHT FUSE-LESS OPERATION WORKS EVEN IN PLUG-N-PLAY MODE!!



IMPORTANT: For your BW3 to know that it is operating in the hardwired mode, it must have the AEG side cable connected to it as shown in the figure before battery is plugged into It. Otherwise, your BW3 may not fire or fire at full-auto without stopping!

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<u>TRICK1</u>: After 3-quick-blink at the end of a command & before dim light is on(4sec), you can pull trigger again to do another command. <u>TRICK2</u>: BB counting can also be used to give you warning before magazine is empty! Just set the count to 10 ~ 20 BB less than actual.

For a 300 hicap MAG, CMD#9 set delay=1 sec, count=280. When gun beeps 4 times after firing, you know it's time to swap out. <u>TRICK3:</u> If your AEG already has a MOSFET, For BW 3 to work in plug-and-play, make sure <u>Gate-Source < 1K ohm, Drain-Source > 10K</u> <u>TRICK4:</u> For some AEG with lighter spring, if it keeps firing after a burst round repeatedly, run CMD# 4 to fix the problem: Instead of 0, 1, 2 for NO PROTECT, LIPO, LIFE PROTECT, input 4, 5, 6 respectively to do the same thing plus correcting the issue. (e.g. 4 instead of 0) <u>ATTENTION:</u> WHEN BW3 CUTS OFF POWER TO YOUR AEG, ALWAYS FIX THE ISSUE FIRST BEFORE USING IT AGAIN! BW 3 proprietary ADAPTIVE RESETTABEL FUSE reliably protects any motor over current situations. Also if battery is weak & can't spin the motor. BW3 LED is brightly "ON".