

E-BLANKS USER MANUAL



Revision 6 - 2023

WARNING

Please read and understand this user's manual before taking your new E-blanks out of the box. It is vital to your safety and to the safety of others that you accurately follow the information contained in this manual.

If you have any questions, please send e-mail, or write to:

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CONGRATULATIONS!

This Electronic Blanks (E-blanks™) product has been designed and manufactured to meet the highest international quality standards. E-blanks is a precision-instrument that serves as a tactical training device, a tool for shooting skills development, and as a means for teaching safe firearms handling. Used and maintained correctly, it will serve you dependably for many years.

To make sure you get the best performance and reliability from your E-blanks product, please read, and follow the procedures outlined in this manual. Please note that like any other training device used with weapons, E-blanks requires safe firearms handling to be a safe product. Like many other electro-mechanical devices, E-blanks products are inherently safe unless they are handled in a careless or irresponsible manner.

You should become familiar with your E-blanks product and its operation before use or firing of the weapon with E-blanks installed. Please study the instructions carefully and make sure you understand the E-blanks operating guidelines.



SAFETY INFORMATION



- E-blanks is not a toy.
- E-blanks is intended for professional training in a supervised and safe environment.
- Never use E-blanks when under the influence of alcohol, drugs or circumstances where your judgment might be impaired.
- Always store your E-blanks in the provided case.
- Your E-blanks product is a precision instrument designed to function within certain parameters. Never attempt to modify your E-Blanks or otherwise alter its function.
- E-blanks is a training and simulation system only; take care not to enter live firing situations with the system installed in the weapon.
- Use only the accompanied E-blanks charger and follow the corresponding charging procedure as described in the maintenance manual.

E-blanks safety is your responsibility

E-blanks is a training simulation system for real weapons and its safe and legal use is the sole responsibility of the user.

Green Ammo AS shall not be responsible in any manner whatsoever for malfunction of the E-blanks products, for physical injury or for property damage resulting in whole or in part from (1) criminal or negligent use, (2) improper or careless handling,

(3) unauthorized modifications, (4) defective or improper equipment, (5) corrosion, (6) neglect, or (7) other influences beyond Green Ammo AS direct and immediate control.

WARNING:

ALWAYS KEEP THE SAFETY CATCH IN THE “SAFE” POSITION UNTIL YOU ARE READY TO FIRE THE WEAPON.

REMEMBER THAT THE SAFETY CATCH IS A MECHANICAL DEVICE, AND AS SUCH, COULD POSSIBLY FAIL. NEVER DEPEND ON ANY SAFETY CATCH TO JUSTIFY UNSAFE GUN HANDLING. ALWAYS KEEP THE FIREARM POINTED IN A SAFE DIRECTION EVEN WHEN THE SAFETY IS ON.

WARNING:

INJURY, DEATH, OR FIREARM DAMAGE CAN RESULT FROM FIRING A FIREARM WITH AN OBSTRUCTION IN THE BORE. BEFORE YOU FIRE, MAKE SURE THAT THE BORE IS NOT OBSTRUCTED.

WARNING:

ALWAYS WEAR EAR PROTECTION WHEN THE E-BLANKS VOLUME IS SET TO HIGH. MAKE SURE THAT NEARBY BYSTANDERS ALSO WEAR EAR PROTECTION.

MEASURED SOUND LEVELS AT 1 METER IS **112DB** ON HIGH VOLUME.

WARNING:

IF TO BE USED NEAR OR IN HUMID ENVIRONMENT OXIDATION CAN OR DOES OCCUR. CLEAN THE EQUIPMENT AFTER USE AND USE PREVENTATIVE OPTIONS BEFORE USE IN HUMID ENVIRONMENT.

WARNING:

ALWAYS ENSURE WEAPONS ARE DRY, CLEAN AND FREE FROM OIL AND OTHER CONTAMINANTS BEFORE INSTALLING YOUR E-BLANKS SYSTEM

WARNING:

ALWAYS KEEP YOUR E-BLANKS SYSTEM DRY AND CLEAN.

E-BLANKS IS AN ELECTRO-MECHANICAL DEVICE AND IT IS IMPORTANT THAT ALL HANDLING, TRANSPORT AND STORAGE FOLLOWS THE NORMAL STANDARDS OF ELECTRONIC USE AND MAINTENANCE.

NEVER STORE YOUR E-BLANKS KIT IN A MOIST, HUMID ENVIRONMENT. NEVER DROP ANY E-BLANKS PARTS ON THE FLOOR

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2 INSTALLATION

Clear the weapon and set the selector to safe. Remove the bolt and charging handle before installing E-blanks.

2.1 CHARGING HANDLE.

Insert the charging handle into the weapon. There is a notch that will fit the widened part of the charging handle.

1. Put the handle oriented correctly into the weapon, match the notch in the weapon with the widened part of the handle
2. Push the handle all the way in





2.2 BOLT

1. **IMPORTANT!** When inserting, push the wheel forward with your thumb. **(If not done correctly this might damage the bolt, resulting in failure to operate properly!)**
2. While pushing the wheel forward slide the bolt into the upper
3. When wheel is past locking mechanism, you can release the wheel
4. Proceed to install the muzzle before closing the weapon





2.3 MUZZLE ROD AND FLASHER

1. Install the muzzle rod into the muzzle flasher
2. Insert the rod with flasher installed into the barrel while keeping the weapon open
3. Hold your hand on the back side of the bolt while inserting the muzzle and tube to click it into place.
4. Close the weapon





NOTE: When removing the LED, the muzzle tube sometimes will follow, so try not to remove the LED in a bending motion, but instead a straight motion.

2.3.1 Close the weapon

After installing, push the charging handle in towards the barrel while pushing the upper down to close it.

Important Note:

Do not slam your weapon closed after installing E-blanks.

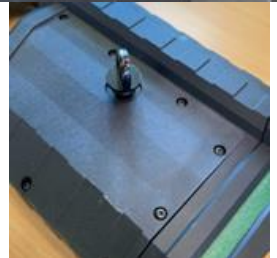
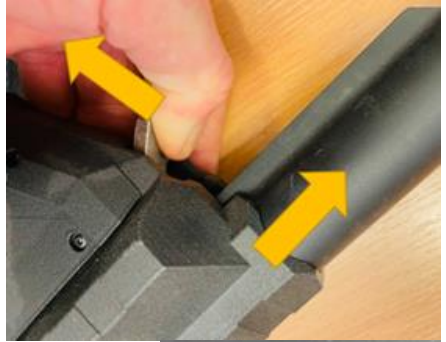
Make sure no magazine is installed when closing the weapon.
Failure to do these procedures may damage your E-blanks system!



2.4 RECOIL

Slide the original stock off the buffer then install the recoil stock. It works like a normal stock where you pull the handle to move it between latch points and pull it all the way down to be able to take it off or put it on.

- Power on: Press circle button once. The recoil will make a sound and the LED will glow green for 3 sec.
- Power off: Press and hold the circle button for 2sec. The recoil will make two rapid shocks and then the LED will glow red for 3 sec.
- Pairing: When the unit is pairing to a Bolt the LED will glow blue for 3 sec. See paragraph 3.1 for pairing guide
- Switching side on latch point: Unscrew the latch point and turn it to the other side (**NOTE: MAKE SURE YOU HAVE THE O-RINGS ON THE LATCHPOINT BOLTS**)



2.5 SOUNDBOOSTER

- Power on: Press circle button once. The speaker will make a sound and the LED will glow green for 3 sec.
- Power off: Press and hold the circle button for 2sec. The speaker will make two rapid sounds and then the LED will glow red for 3 sec.
- Pairing: When the unit is pairing to a Bolt the LED will glow blue for 3 sec. See paragraph 3.1 for pairing guide



2.6 E-MAG

Make sure the E-mag is not damaged before using it. If the display shows 300/300 it is full, however if it shows 0/300 rounds in your pool count you need to charge to reset the bullet count.

The magazine start menu is changed in 0.6.0, the functionality and installation are the same as before.

1. Press any button to activate the magazine from deep sleep (NOTE: Magazine will go into deep sleep after 6 hours unused)
2. Make sure you have 30 rounds. (NOTE: you can fill more using the diamond button if you have more in your pool count of 300 total. Hold the diamond button in for 2 sec to refill)
3. Pair the bolt with the system using the magazine if not already done.



3 STARTING UP

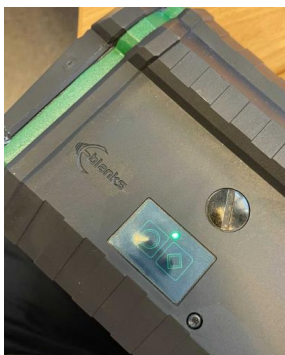
Important Note:

If the E-blanks system that is being installed has not been used in the weapon before it is likely that the E-blanks system needs to be calibrated to the weapon in use before E-blanks will function properly.

See E-blanks Maintenance Manual paragraph 4.1 calibration

1. Install the E-blanks kit as described in paragraph 2
2. Start the recoil by pressing the circle button, it will glow green in the LED for 1 sec.
3. Start the Soundbooster by pressing the circle button, it will glow green in the LED for 1 sec
4. Check the rounds in E-mag.
5. Pair Recoil and Soundbooster in the menu on the magazine (**IF NOT ALREADY PAIRED**)
6. Insert E-mag.

When the bolt gets in contact with the magazine the LED will glow yellow, this indicates that there are no rounds in the chamber. Pull the charging handle back to bring a bullet into the chamber, the LED will now change to white indicating an electronic bullet is in the chamber.

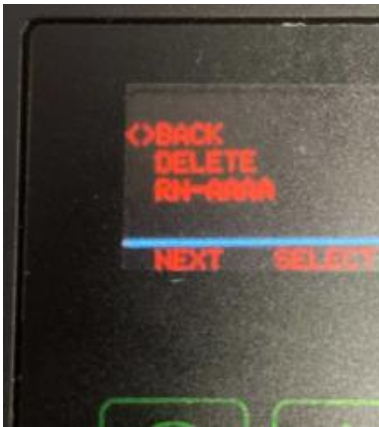


3.1 PAIRING

To pair the units to the bolt:

1. Make sure the Bolt is installed correctly into the weapon
2. Turn the units you want to pair ON (**NOTE: If one or both is already paired and connected to another active bolt it's not possible to find the units on search in the menu**)
3. Go into the magazine menu
4. Click Pair in the menu
5. Choose either Recoil or Sound to be paired (**NOTE: You can pair both to the bolt at the same time, but you need to scan for them separately**)

6. When into either Recoil or Sound searching menu the Bluetooth Name will be visible in the menu. **(NOTE: The Bluetooth name is printed on the label of your E-blanks unit)**
7. After correct unit is picked click Save and Exit
8. Now the display will change into Insert Mag with a countdown.
9. Insert the magazine into your weapon with the installed Bolt, now the Bolt will always be paired to this Bluetooth unit until it gets told to pair with another unit.
10. Observe the LED on the units to be paired, it will turn blue for a short time while pairing.





3.2 MODES

To activate modes:

1. Go into the mode menu on the magazine
2. Select modes you want
3. Click Save and Exit
4. Inset magazine into the bolt
5. The bolt will now have the mode activated until the bolt loses all power when the blue light is no longer glowing





3.2.1 Mode Description

<i>Mode name</i>	<i>Mode Description</i>
Stoppage	One random bullet between 28 and 3 will be faulty and cause a stoppage. The Bolt LED in the chamber will glow red indicating a stoppage. Clear the round with the charging handle. If this does not clear it remove the magazine and insert it again then clear a new round. (Follow the SOP for stoppage 1 or stoppage 2)
Night Mode	Turns off the LED in the chamber
Mute	Turns off the sound in the magazine

4 OPERATION

4.1 BATTERY LIFE AND DISCHARGING OVER TIME

The system is estimated to last for 300 shots or until the battery icon is depleted. When the system is installed into the weapon, it will still use power from the battery because it is turned on in that configuration to be prepared to fire at any instant. To ensure the longest battery life, it is suggested that you test and confirm that the system is working, then remove the magazine and set it to off before inserting it again.

The estimated battery life is 1-3 months in OFF mode depending on charge status when turned off.

Normal operation times are 24 hours continuously ON. That means if you have the system turned ON and installed in the weapon for 25 hours it will be depleted even if you have not fired any rounds.

4.2 AUTO TURN OFF

The system will automatically turn itself into deep sleep after 6 hours of being unused and turned on, this is to preserve function- and battery life. There is an exception to the Auto turn off period and that is when a magazine is installed into the weapon with a bolt, due to high power needs the magazine will turn off hammer driver and speaker driver after **1 HOUR** to wake it up take the magazine out, click any button and insert it into the weapon again. The bolt should be turned on again, however you will need to load in another bullet into the chamber.

4.3 LOADING A BULLET INTO THE CHAMBER

When the bolt is powered up the LED indication in the ejector port shows the state of the weapon. Yellow light means there is no bullet chambered, to extract a bullet from the magazine use the charging handle, the light will turn white when a bullet is in the chamber.



4.4 SHOOTING SINGLE SHOT

When the LED in the ejection port is white a round is chambered and ready to be fired.

1. Set the selector to single shot
2. Pull the trigger
3. E-blanks will reset the hammer, the recoil and Soundbooster will fire and the muzzle light up during the shot.

4.5 SHOOTING FULLY AUTOMATIC

When the LED in the ejection port is white a round is chambered and ready to be fired.

1. Set the selector to automatic shot
2. Pull the trigger
3. E-blanks will reset the hammer, the recoil and Soundbooster will fire and the muzzle light up during the shot.

4.6 RELOADING BULLETS

When the E-mag is out of rounds, the bolt will run a final simulation to reset the trigger so that its possible to set the weapon to safe and the LED in the ejector port will change from white to yellow, indication no bullet left in the chamber.

CAUTION: THE MAGAZINE WILL FALL FREE WHEN THE MAGAZINE CATCH IS PRESSED. DON'T ALLOW THE MAGAZINE TO FALL ONTO A HARD SURFACE. DOING SO MAY DAMAGE THE MAGAZINE.

1. Remove the magazine from the weapon.
2. Press the Diamond button to fill rounds from the pool of 300 into the magazine. *TIP: Hold the Diamond button for 3 sec and release to instantly fill 30 new rounds.*
3. Insert the magazine into the weapon again.

4.7 BOLT RELEASE/CATCH

If the magazine used is shot empty the bolt release will be active for the duration of the bolt life (currently 6 sec)

To use the bolt release:

1. Remove the magazine when it is empty
2. Quickly swap it with a E-blanks magazine that has rounds in it (Before the LED in the ejector port is gone)
3. Press the bolt release
4. LED will change from yellow to white, ready for firing.

4.8 BOLT LIFE AFTER REMOVING MAGAZINE

To keep the wireless connection to the E-blanks recoil and E-blanks soundbooster and keep temporary programmed modes to last between the magazine changes the E-blanks bolt simulator is equipped with a super capacitor that will last for 6 seconds. If the magazine is removed, you can easily see that the connection is kept stable indicated by a blue light in the

ejector port. When this light is gone, the connection is lost, but the pairing is **remembered**. However, modes are lost and needs to be re-applied.

