



**MAZTECH
INDUSTRIES**



X4 FIRE CONTROL SYSTEM

X4-FCS™

WITH



APPLIED BALLISTICS

USER MANUAL



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CONGRATULATIONS ON YOUR PURCHASE!

The X4-FCS™ is a revolutionary fire control system (FCS) with integrated Applied Ballistics® calculator for your preferred Low Power Variable Optic (LPVO).

For instructional videos and additional information, visit our website at www.MaztechIndustries.com. You can also get there by scanning this QR code with your smartphone or tablet:



PACKAGE CONTENTS

The following are included with the X4-FCS™:



18650 Batteries



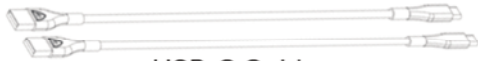
Bluetooth®
USB Dongle



Cloth Drawstring Bag



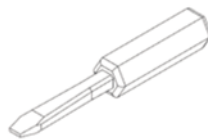
Stickers



USB-C Cables



T15 Torx Wrench



Mini Flathead
Screwdriver



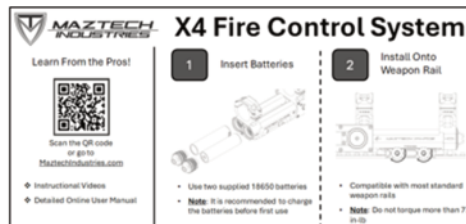
Lens Cleaning Cloth



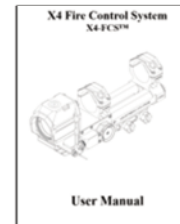
Patch



Loctite® 242



Quick Start Guide

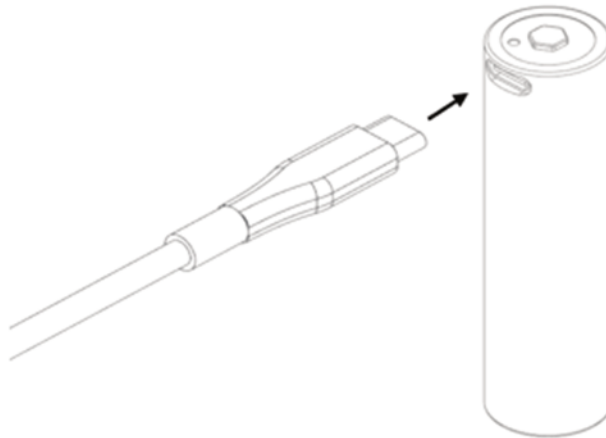


This Manual

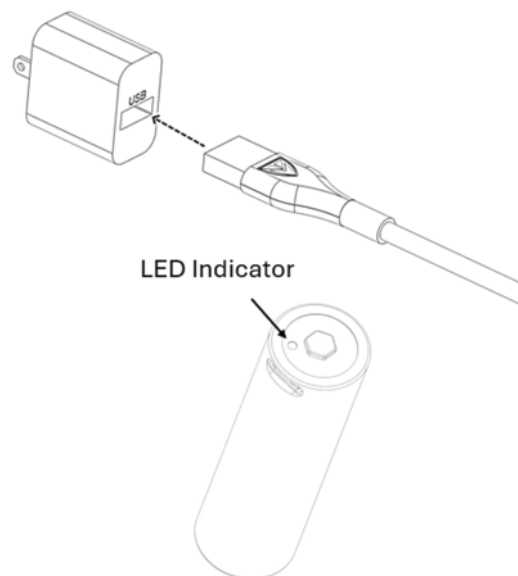
CHARGING YOUR BATTERIES

It is recommended to charge the Maztech 18650 batteries before first use by utilizing the provided USB-C cables:

1. Plug the USB-C cable into the battery charging port:

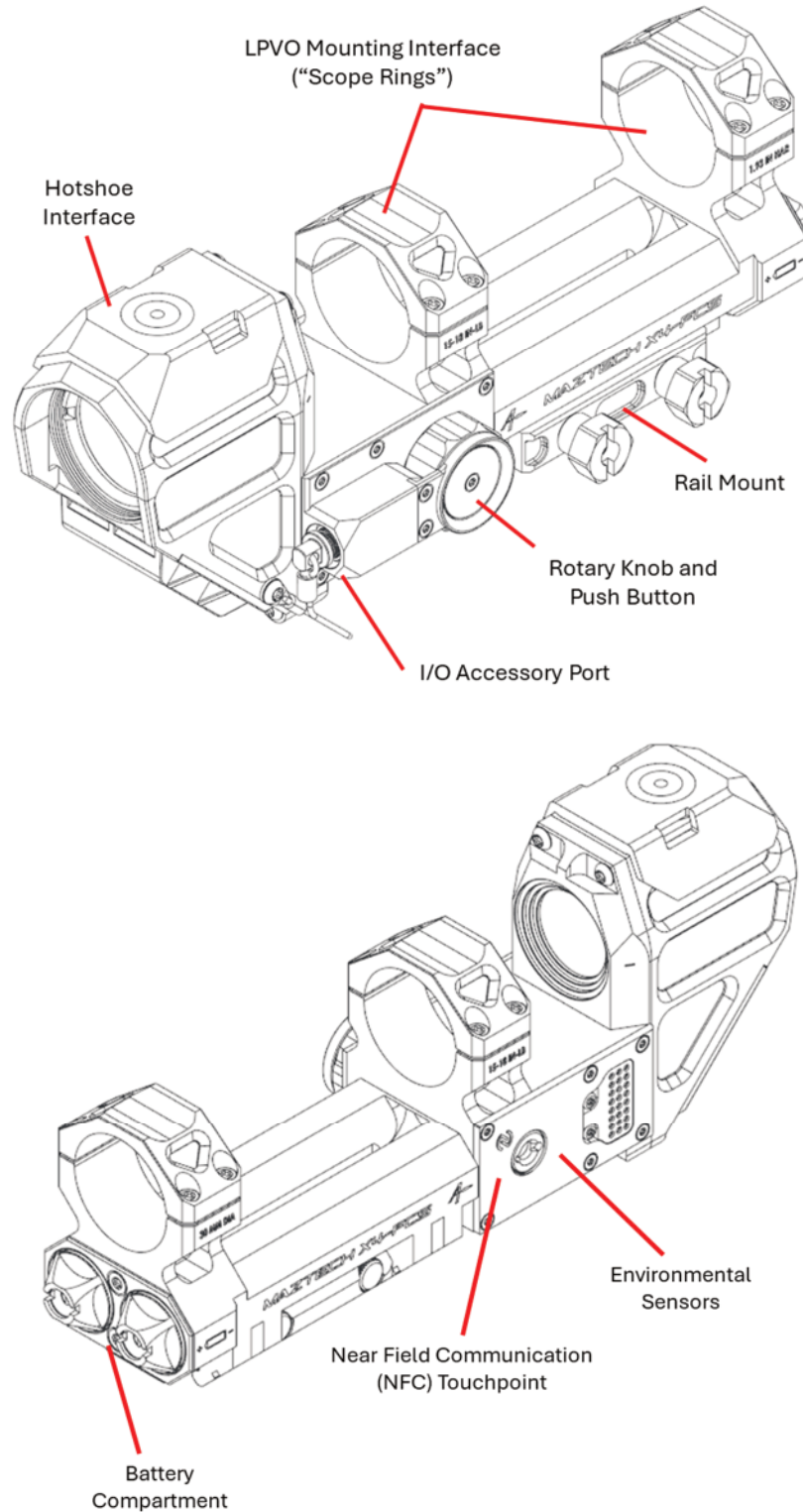


2. Plug the other end into any standard USB port or wall-charger (not provided):



3. When properly charging, a small LED on the battery will **blink red**. It will become **solid red** when charging is complete.
 - **Important:** If the light on the battery is **solid green**, this means the battery is NOT charging. Try a different power source.

GETTING TO KNOW YOUR X4-FCS™



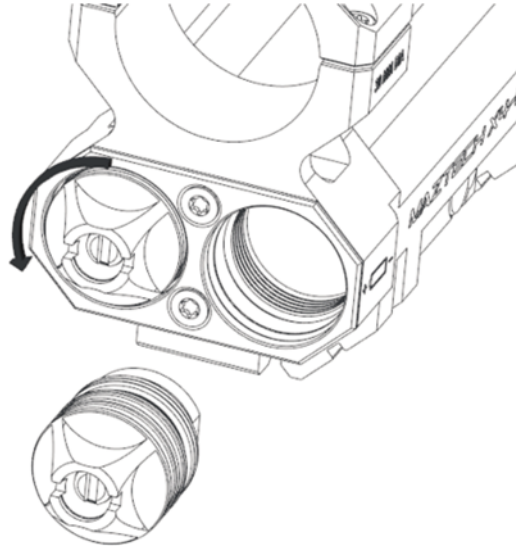
INSTALLING BATTERIES

The X4-FCS™ is capable of operating different battery types:

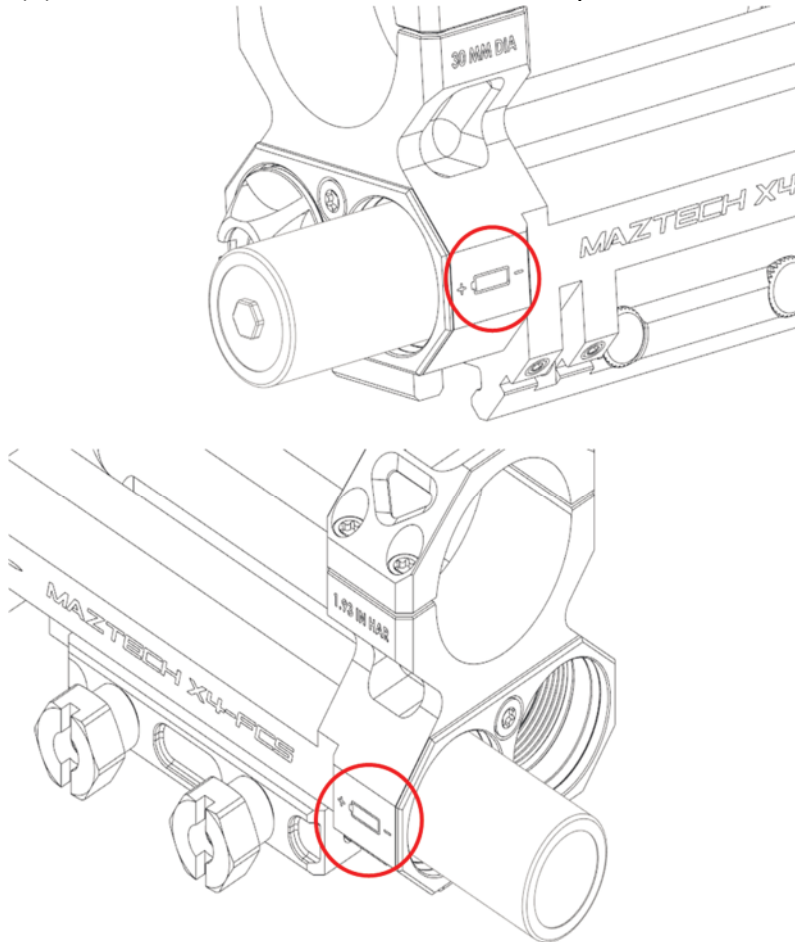
- Two 18650 (supplied)
- Four CR123

WARNING! Do not mix battery types, old and new batteries, or batteries of different chemistries (e.g., alkaline, NiCd, NiMH, lithium). Mixing batteries can cause them to leak, overheat, or even explode, resulting in personal injury or damage to your device. If using lithium batteries, use only protected lithium batteries.

1. Unscrew the battery caps by hand:

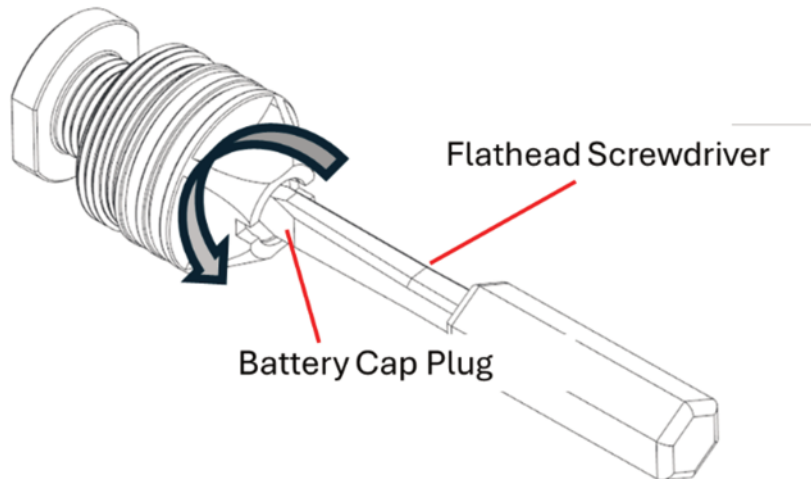


2. Insert batteries with +/- polarity as shown on the X4-FCS™ housing. If using CR123 batteries, two (2) batteries will be installed in each battery chamber:



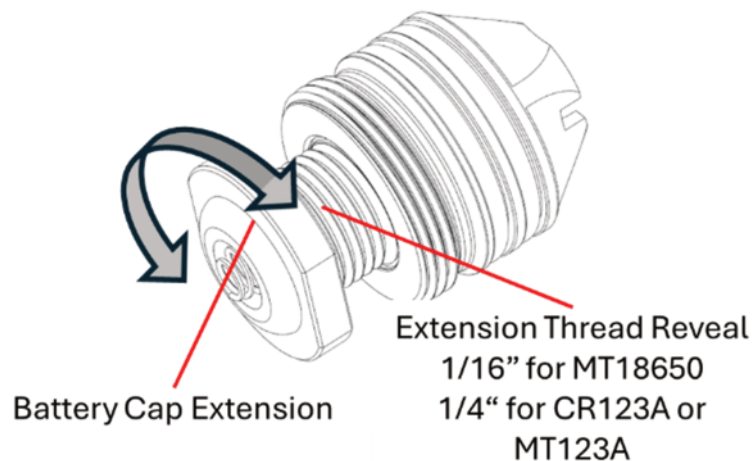
3. **For first use:** This step is not necessary (battery caps are shipped to work with Maztech-supplied 18650 batteries)

Adjust the battery cap extension to the proper length, depending on the battery type used. Using the supplied flathead screwdriver, loosen out the battery cap plug.



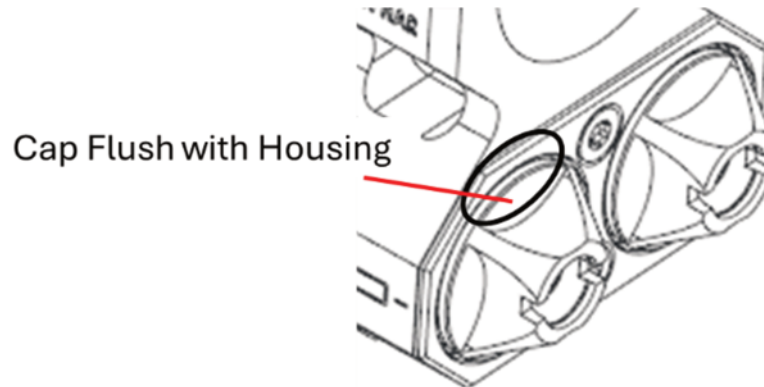
CR123: The battery cap extension should reveal about 1/4" of tread.

18650: The extension should reveal about 1/16" of thread.

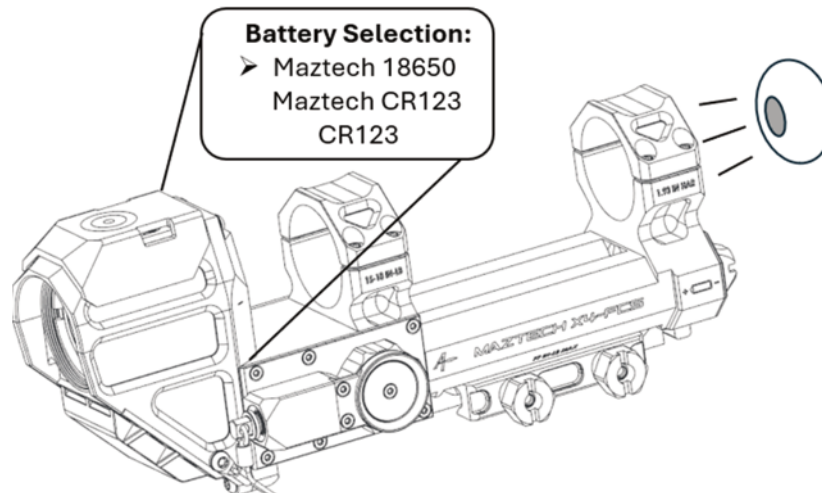


Then use the flathead screwdriver to re-tighten the battery cap plug.

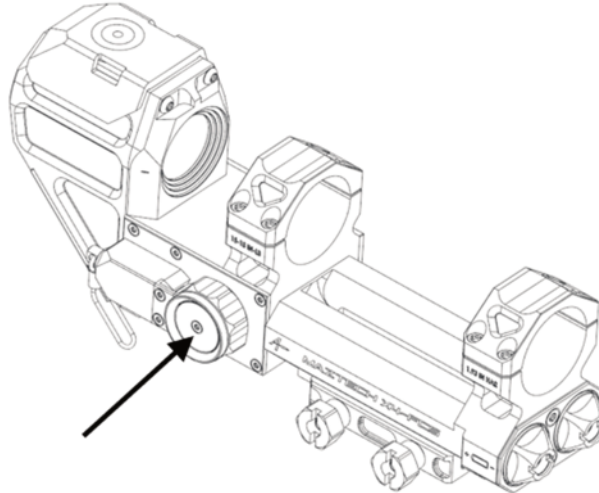
4. Install the battery cap into the battery chamber and hand-tighten the battery caps. When tightened, the battery cap should be about flush with the X4-FCS™ housing. If not, adjust the battery cap extension as needed.



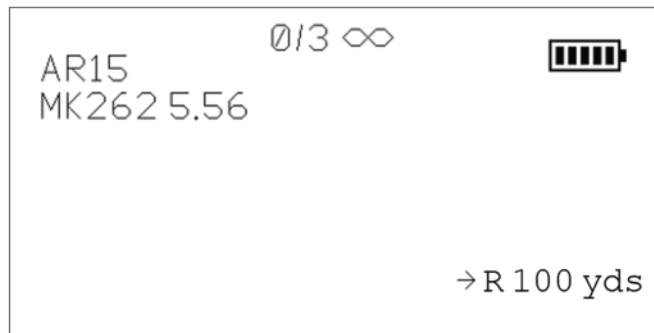
5. Look into the X4-FCS™ display as shown. Use the rotary knob to select the proper battery type:



6. Press the button on the X4-FCS™ to confirm battery type selection:



7. The X4-FCS™ display should now look similar to this:



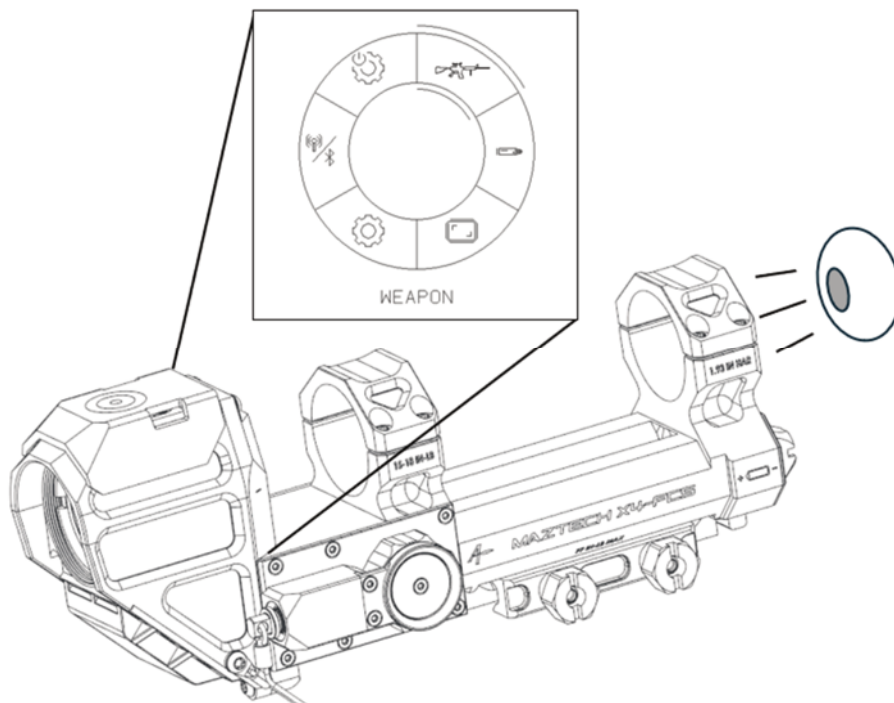
POWERING ON/OFF YOUR X4-FCS™

The X4-FCS™ will automatically power-down after 30 minutes of non-use.

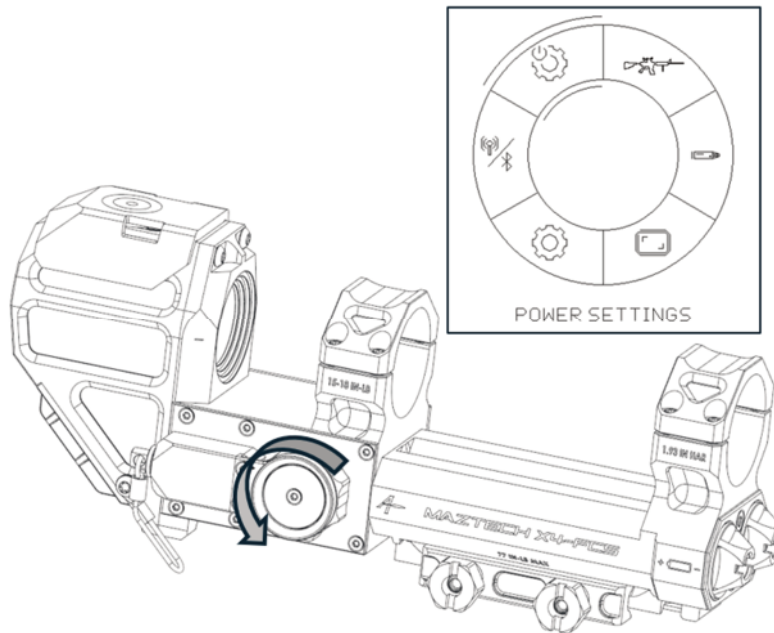
- Shake-to-wake: When motion is detected, the system will power-up automatically.
- To adjust the 30-minute setting see section *Menu System and Features >> Weapon Profile Setting* on page 90.

To manually power-down and prevent motion from powering up the X4-FCS™:

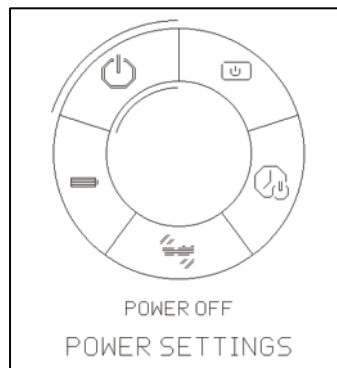
1. Click and hold (for 1 second) the X4-FCS™ button. Then look into the X4-FCS™ display to see the X4-FCS™ main menu:



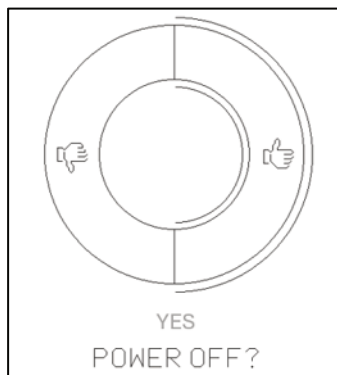
2. Rotate the knob to navigate to *POWER SETTINGS* menu and click the button to select:



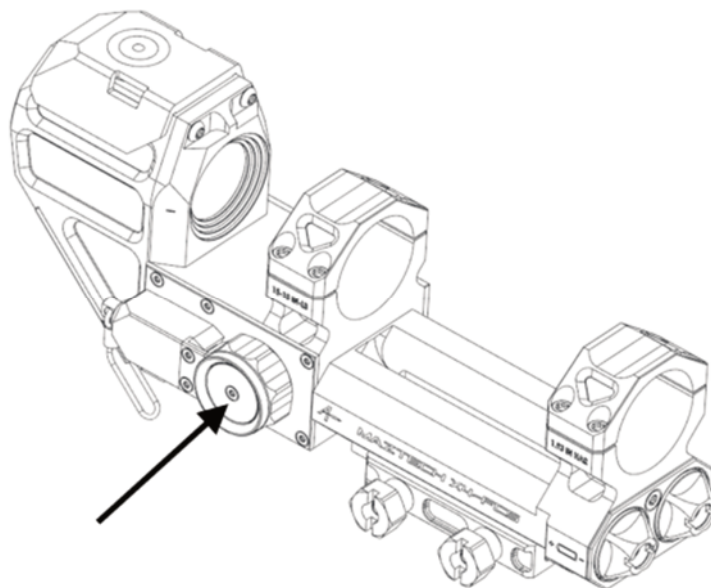
3. Rotate the knob to navigate to *POWER OFF* and click the button to select:



4. Rotate the knob to navigate to *YES (with Thumbs-Up)* and click the button to select:



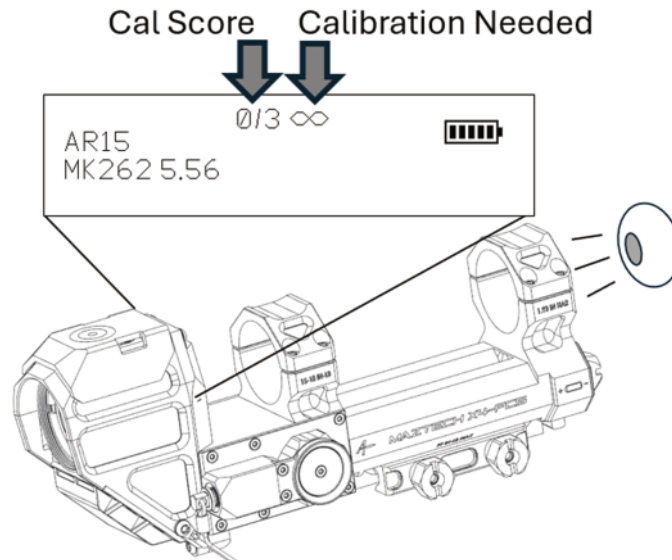
Important: After manually powering down the X4-FCS™, it will only turn back on when you press the X4-FCS™ button:



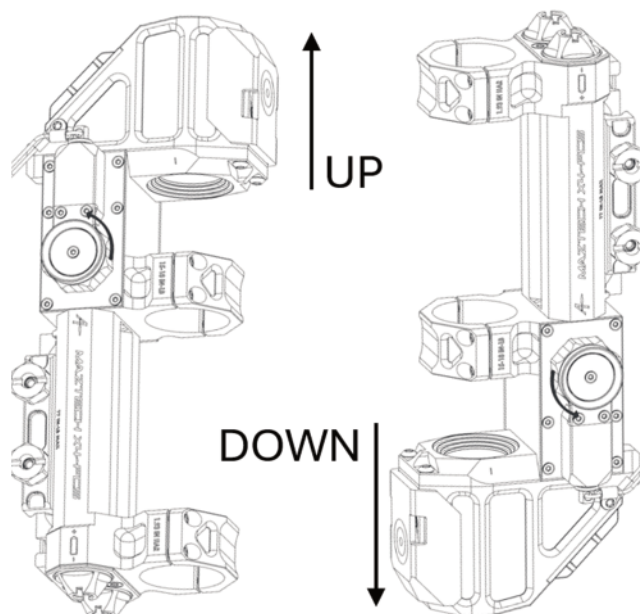
X4-FCS™ COMPASS CALIBRATION

After batteries are installed, a simple calibration routine needs to be performed in order for the X4-FCS™ to display an accurate compass heading.

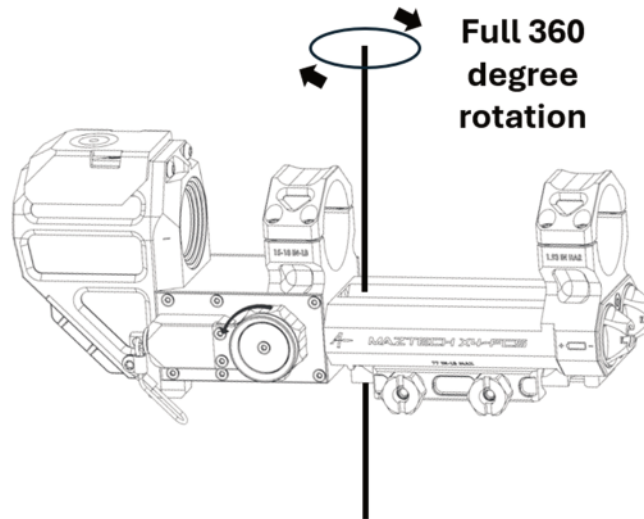
1. Looking into the X4-FCS™ display, you should see the following two indicators:



2. Point the X4-FCS™ up and down, holding it in each position for approximately 2 seconds.

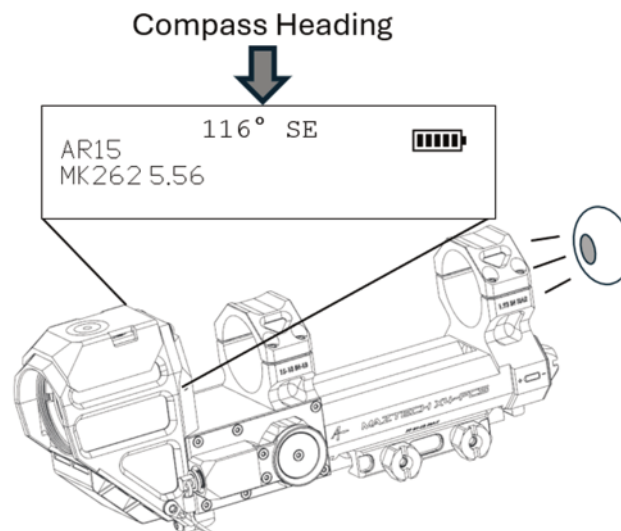


3. While holding the X4-FCS™ horizontal to the ground, spin it around a full 360 degrees.



- **Tip:** For an online video demonstrating compass calibration, go to www.maztechindustries.com

4. After a successful calibration, you will see a proper compass heading in the X4-FCS™ display:



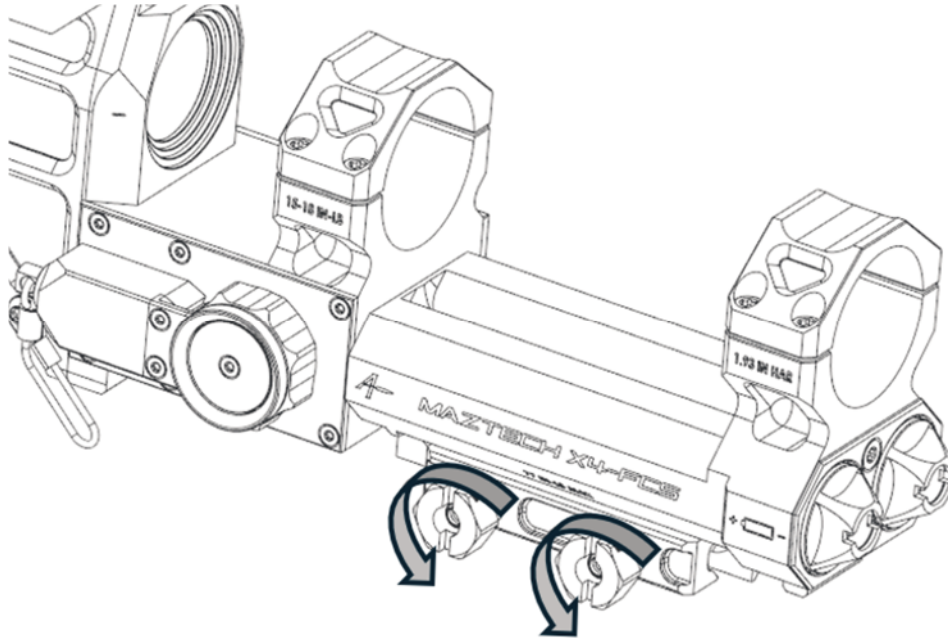
Important: This step will need to be performed any time batteries are changed.

- **Hint:** After installation of the X4-FCS™ on your weapon, field-strip your firearm in order to safely and easily perform compass calibration without having to remove the X4-FCS™ from your weapon.

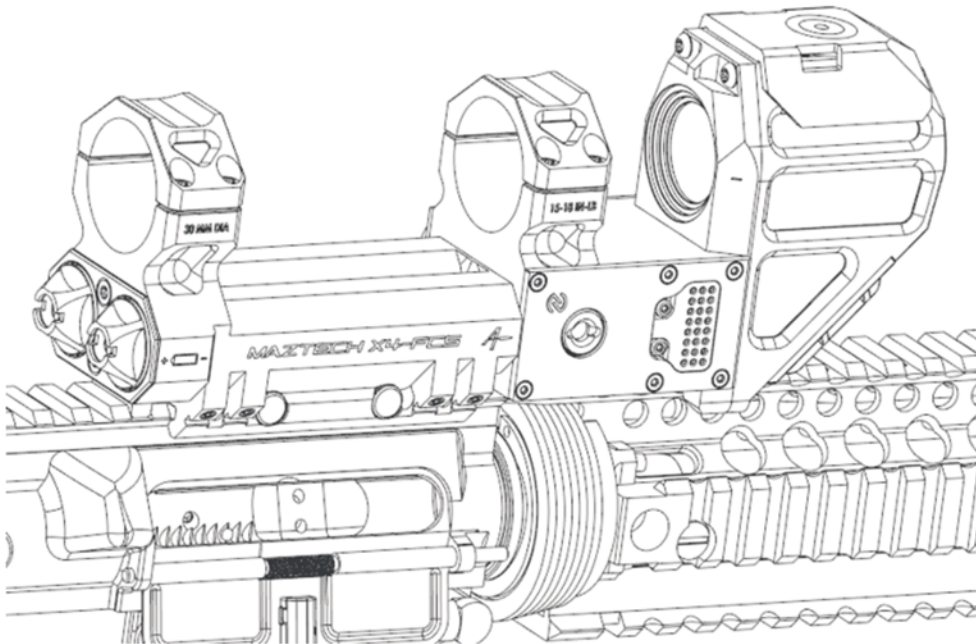
INSTALLING X4-FCS™ ON YOUR WEAPON

Tip: Perform compass calibration (see section *X4-FCS™ Compass Calibration* on page 15) before installing X4-FCS™ on your weapon

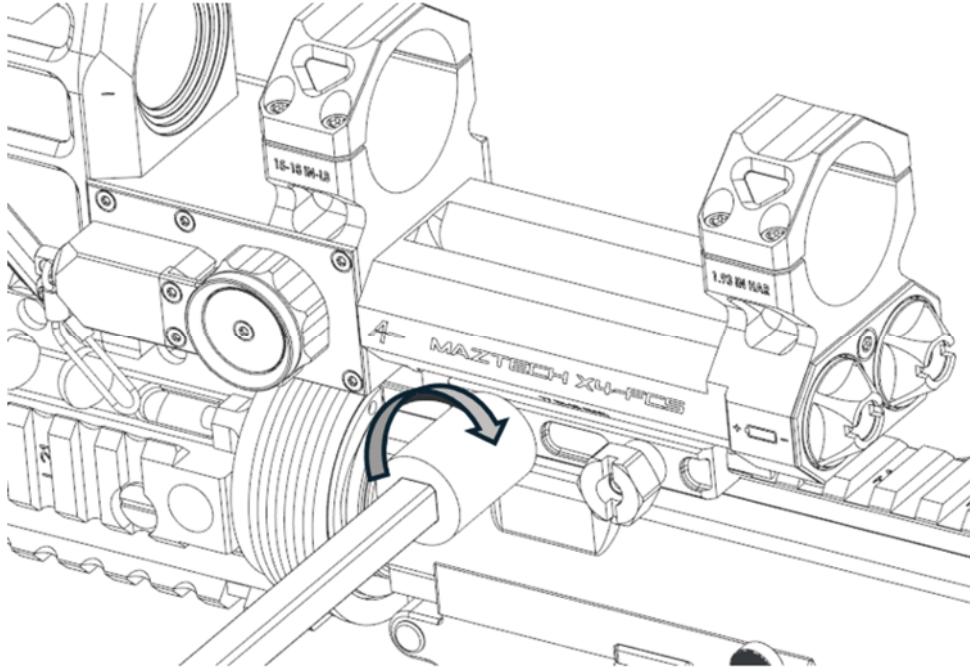
1. Loosen both rail bolts on your X4-FCS™:



2. Place X4-FCS™ onto weapon rail:



3. Tighten both rail bolts using a 1/2-inch wrench:

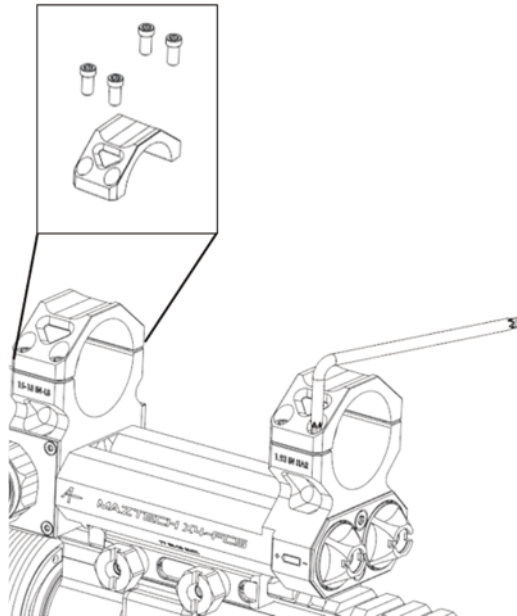


Important: Do not torque more than 77-in-lb. If you do not have a torque wrench, turn to 1/4 turn past hand-tight.

INSTALLING YOUR LPVO

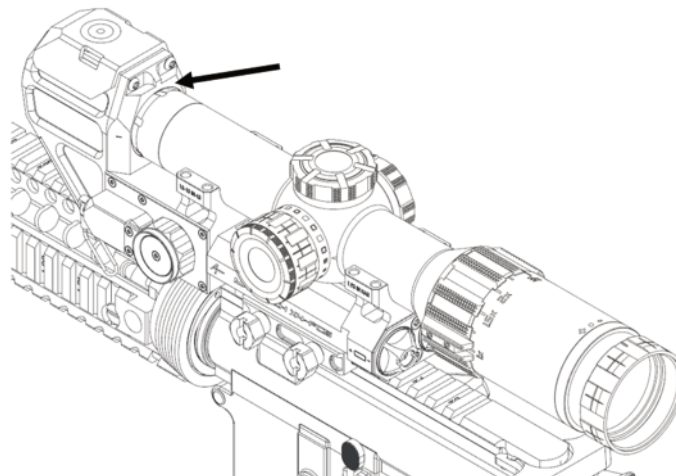
Tip: Install X4-FCS™ on your weapon (see previous section) before installing your LPVO.

1. Use a T15 Torx tool (provided) to remove the scope rings from the X4-FCS™:



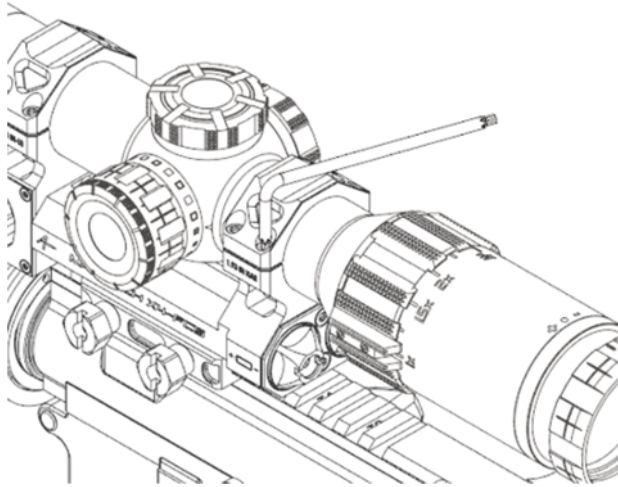
Important: If you purchased an X4-FCS™ Diving Board Mount or you want to install a Reptilia® or Geissele® red-dot mount on top of your X4-FCS™, now is the time to locate it and have it ready to install.

2. Place your LPVO inside the X4-FCS™ so that the front of the LPVO is contacting the X4-FCS™ housing:



Tip: If you are using the X4-FCS™ in a maritime environment, leave a small gap to allow for quicker water egress.

3. Place the scope rings back on the X4-FCS™ and loosely-tighten the T15 Torx fasteners:
 - **Note:** If desired, use X4 Diving Board Mount or Reptilia® or Geissele® red-dot mount instead of the X4-FCS™ Scope Rings. In these cases, it is required to use the fasteners from the original manufacturer.

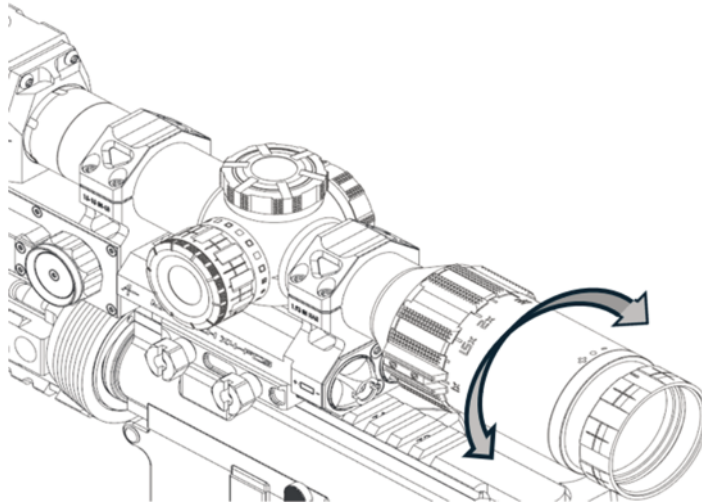


Important: Tightening the fasteners occurs after LPVO alignment (see next section).

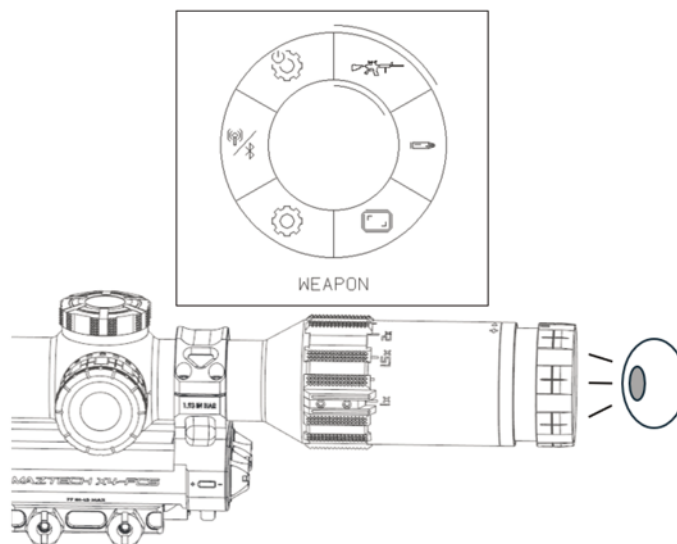
LPVO INITIAL ALIGNMENT

After installing your LPVO (see previous section), the X4-FCS™ needs to be aligned to your LPVO reticle.

1. Slightly loosen the T15 Torx fasteners so your LPVO can rotate inside of the scope rings:



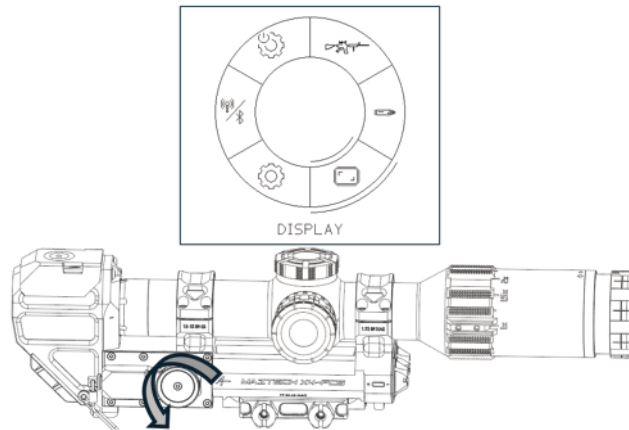
2. Click and hold (for 1 second) the X4-FCS™ button. Then look through your LPVO to see the X4-FCS™ main menu:



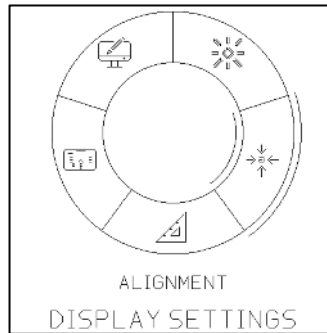
- **Hint:** It is helpful to adjust the zoom of your LPVO in order to easily see the X4-FCS™ menus. However, be sure to balance the zoom level so that you can still see the instructions above each menu:

SINGLE-CLICK: SELECT
LONG-CLICK: EXIT
DOUBLE-CLICK: EXIT

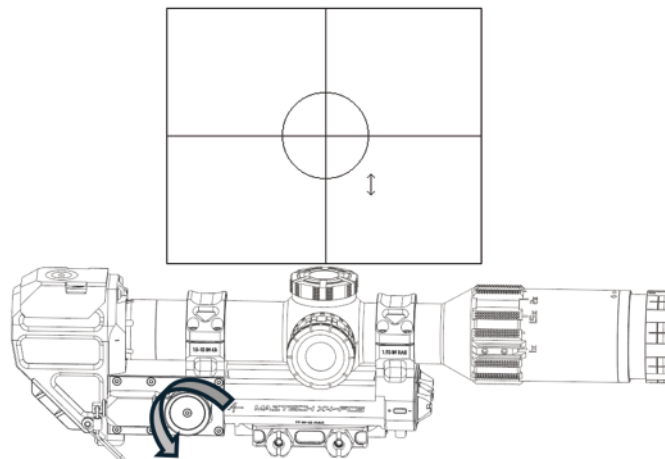
3. Rotate the knob to the *DISPLAY* menu. Then click the X4-FCS™ button:



4. Rotate the knob again and click to select *ALIGNMENT*:



5. Now use the X4-FCS™ knob to move the X4-FCS™ crosshairs to align with your LPVO reticle:

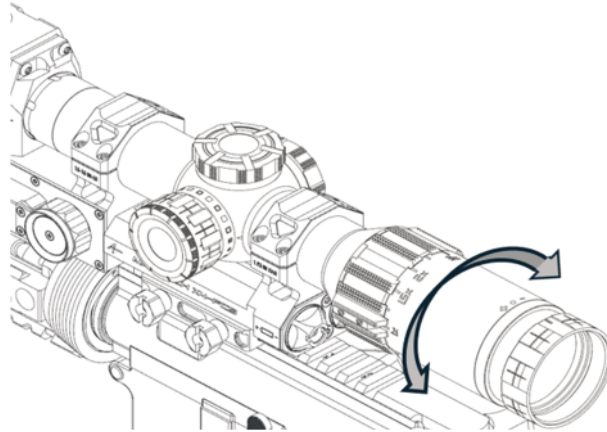


Single-clicking the X4-FCS™ button will toggle between knob functions:

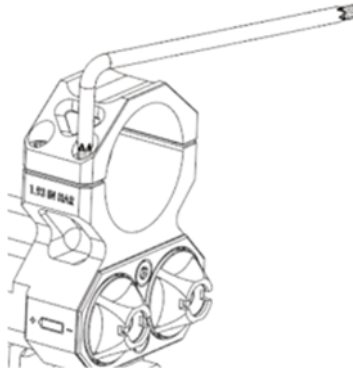
- ❖ Left-Right
- ❖ Up-Down

- **Hint:** During alignment, adjust your LPVO to the maximum zoom level that allows you to properly see both reticles.

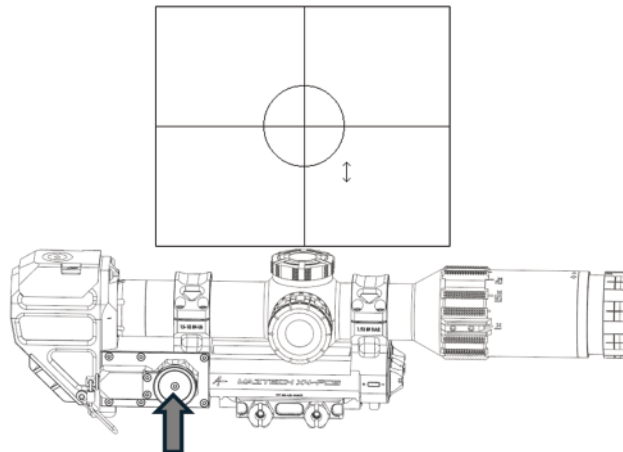
6. Rotate your LPVO so its reticle and the X4-FCS™ reticle are horizontally aligned with each other:



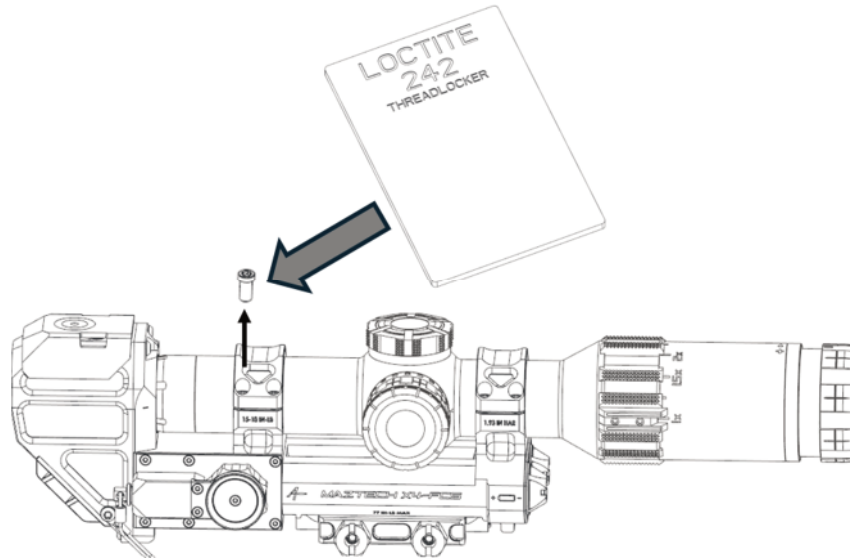
7. When the rotation is aligned, hand-tighten the scope rings so the LPVO can no longer rotate:



8. Re-check the X4-FCS™ crosshairs against the LPVO reticle and continue digital adjustment, if necessary:



9. Click and hold (for 1 second) the X4-FCS™ button to save the alignment settings.
10. Finally, remove one of the scope ring fasteners, apply Loctite® 242 (provided) to the threads and re-install the fastener with 15 to 18 in-lbs. of torque:
 - **Note:** Use of Loctite® 242 is optional. However, do NOT use other types of thread locker.



11. Repeat for each of the eight scope ring fasteners, one at a time to keep the LPVO in place.

Congratulations on completing the initial alignment!

- The final digital alignment will occur after weapon zeroing at the firing range.

INSTALLING THE MAZTECH COMPANION APP

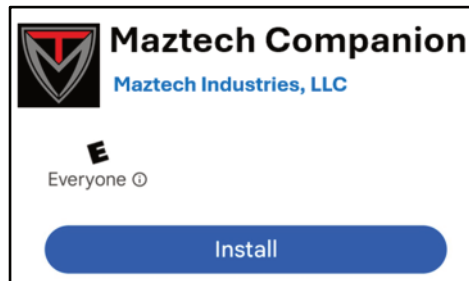
Maztech recommends connecting your X4-FCS™ to your smartphone via Bluetooth® Wireless Technology for the most efficient setup of your ballistic profiles.

➤ **Note:** If you do not want to connect your X4-FCS™ to your smartphone, see section *Ballistic Setup* on page 42 to setup ballistic profile(s) without a wireless connection.

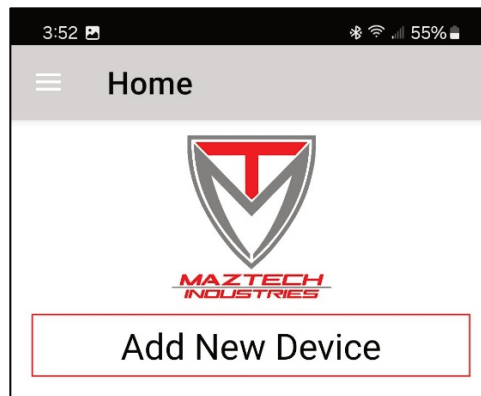
1. Use your smartphone to connect to the App Store or Google Play:



2. Search for **Maztech** or **Maztech Companion** and install the app on your phone:



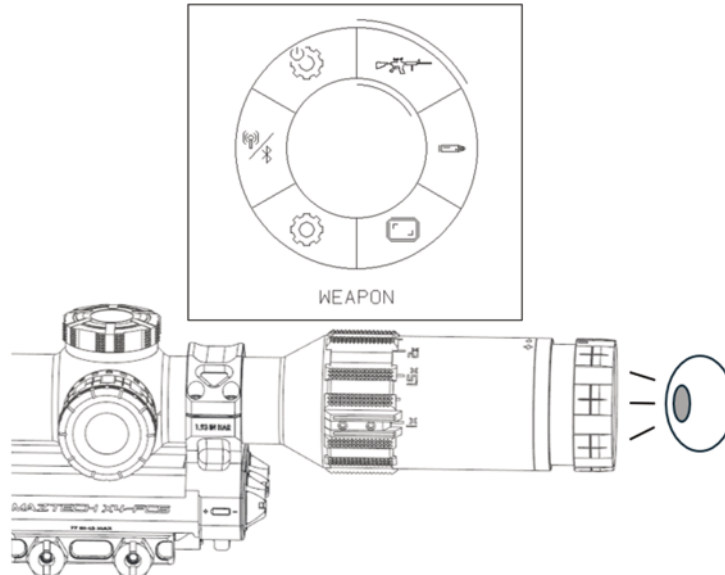
3. Launch the Maztech Companion App and you should see a screen that looks like this:



Note: Before attempting to initiate a wireless connection to the X4-FCS™, verify you have Bluetooth® enabled on your smartphone.

CONNECTING X4-FCS™ TO MAZTECH COMPANION APP

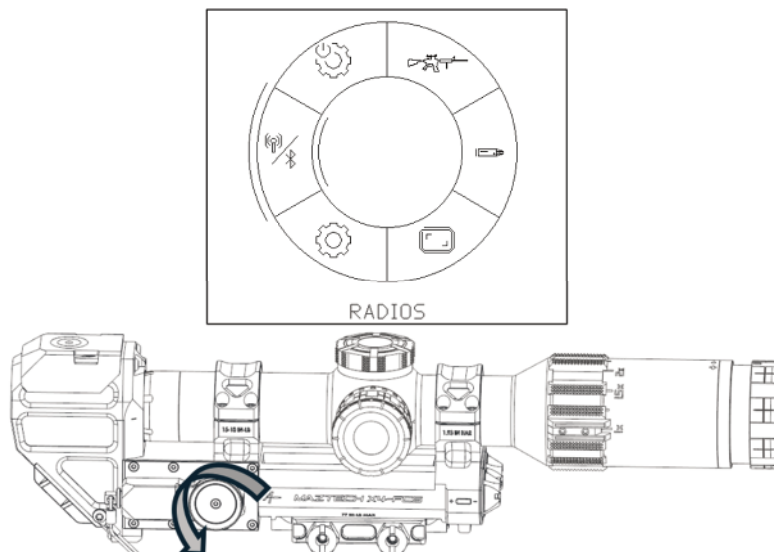
1. Click and hold (for 1 second) the X4-FCS™ button. Then look through your LPVO to see the X4-FCS™ main menu:



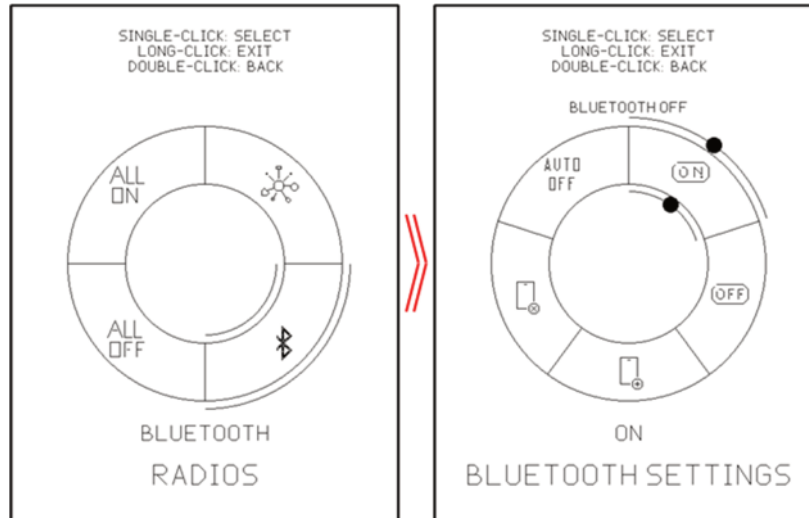
- **Hint:** It is helpful to adjust the zoom of your LPVO in order to easily see the X4-FCS™ menus. However, be sure to balance the zoom level so that you can still see the instructions above the menu:

SINGLE-CLICK: SELECT
LONG-CLICK: EXIT
DOUBLE-CLICK: EXIT

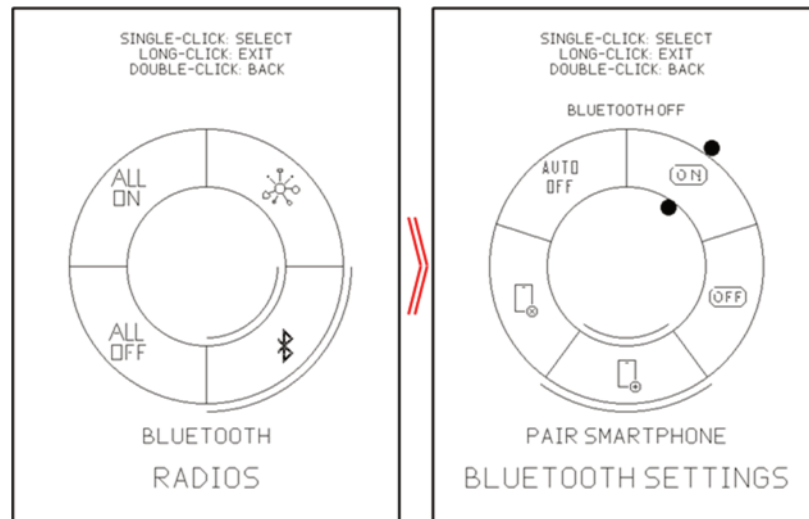
2. Rotate the knob to the *RADIOS* menu. Then click the X4-FCS™ button:



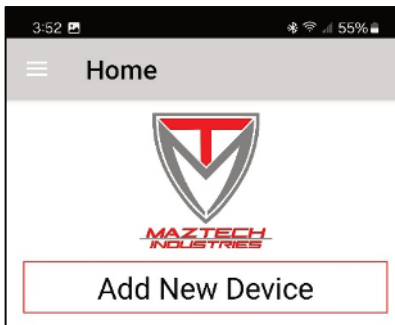
3. Turn ON the *BLUETOOTH*® radio by first *rotating* the knob and select *BLUETOOTH*®. Rotate the knob again and select *BLUETOOTH*® ON:



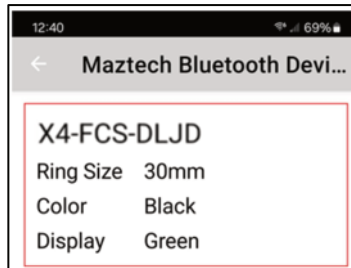
4. Click the button again to re-enter the *BLUETOOTH*® sub-menu. Finally, rotate the knob and select *PAIR SMARTPHONE*:



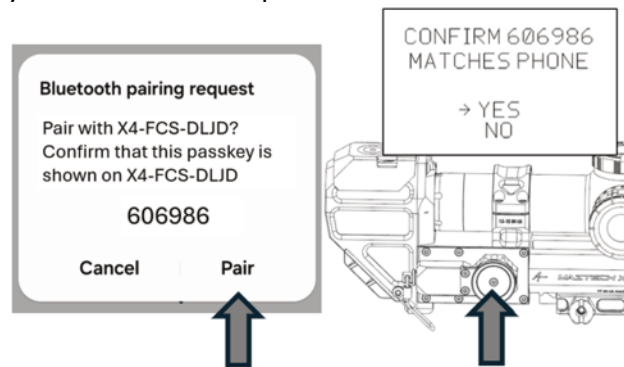
5. On the Maztech Companion App, touch the **Add New Device** button:



6. Your X4-FCS™ will show up as an available device. Touch the box with the **red** outline:



7. After pairing starts, you will need to respond to confirmations on **both** devices:



Touch *Pair* on your phone and click the X4-FCS™ button to confirm pairing operation.

8. When pairing is complete, the X4-FCS™ will show up as a device in the Maztech Companion App:



Touch here to connect to the X4-FCS™ via Bluetooth® Wireless Technology.

Note: It will take approximately 10 seconds to create an encrypted connection:



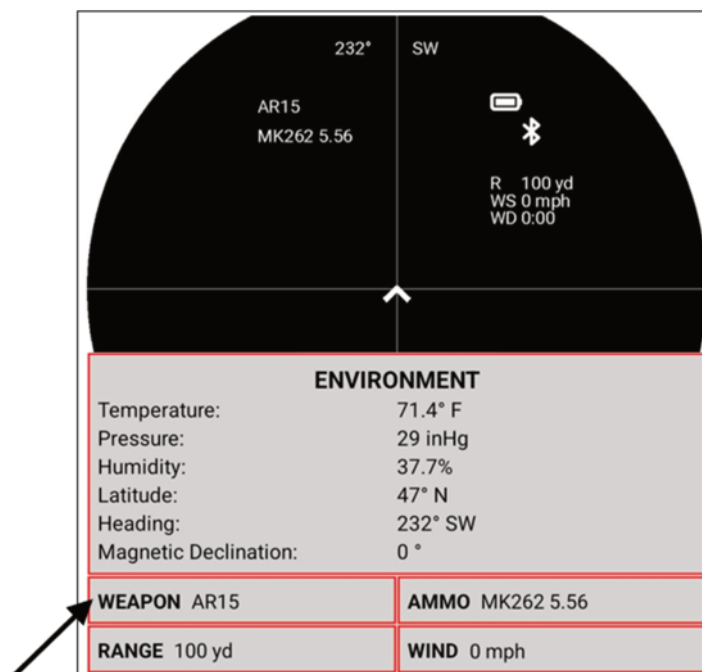
SETTING UP BALLISTIC PROFILES (WITH SMARTPHONE)

You can now use your Maztech Companion App to setup ballistic profiles on your X4-FCS™.

➤ **Note:** If you do not want to connect your X4-FCS™ to your smartphone, see section *Ballistics Setup* on page 42 for instructions on setting up ballistics profiles without a wireless connection.

Select Weapon Profile:

1. Select the *WEAPON* button to open the weapons profile list.

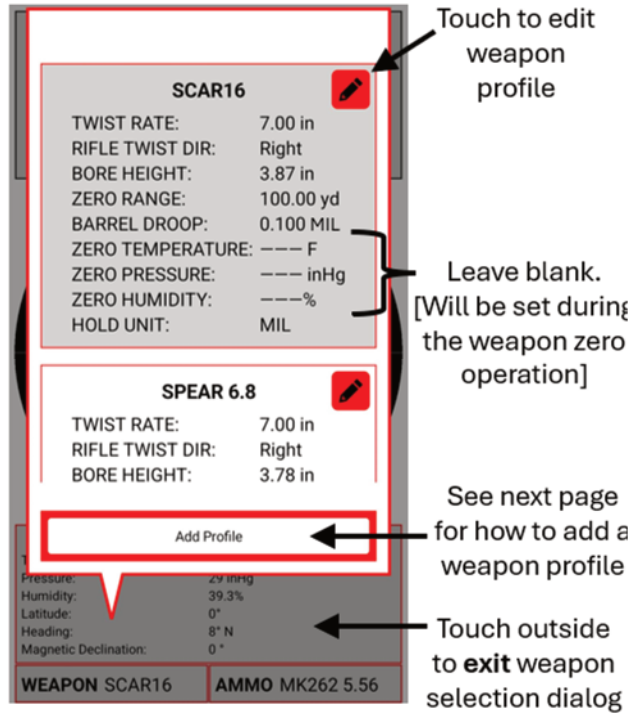


Touch here to select your weapon.

- **Hint:** Anything in the app with a red box around it is something you can touch to adjust
2. Scroll through and select one of the pre-configured weapon profiles already available.
 3. Select the desired weapon profile and verify the profile is shown in the weapons button.

Add Weapon Profile:

1. From the Weapons Profile list, select the *Add Profile* button.



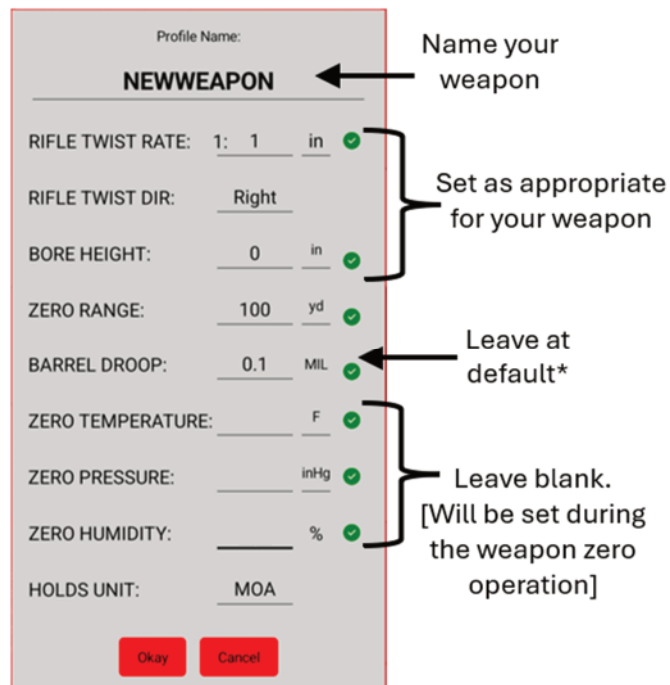
Touch to edit weapon profile

Leave blank.
[Will be set during the weapon zero operation]

See next page for how to add a weapon profile

Touch outside to exit weapon selection dialog

2. Input the *Profile Name*, *RIFLE TWIST RATE* and *RIFLE TWIST DIRECTION* from the weapon manufacturer.



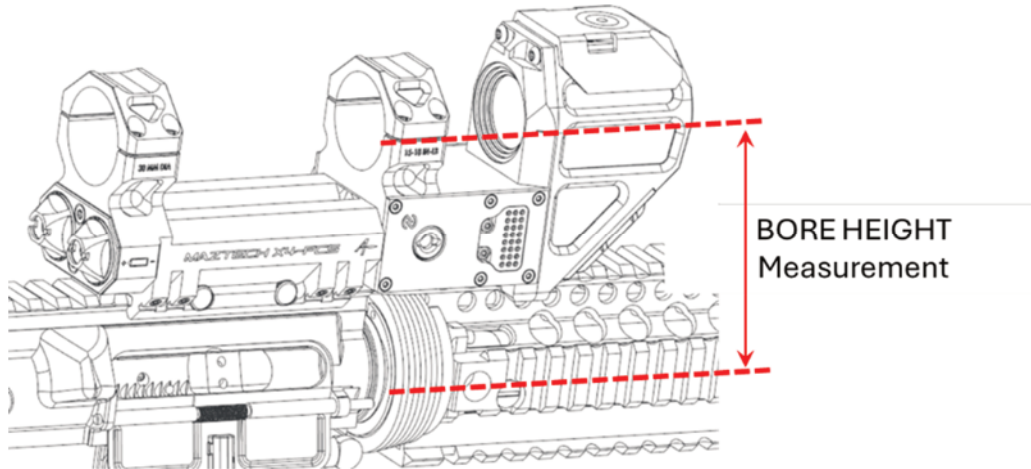
Name your weapon

Set as appropriate for your weapon

Leave at default*

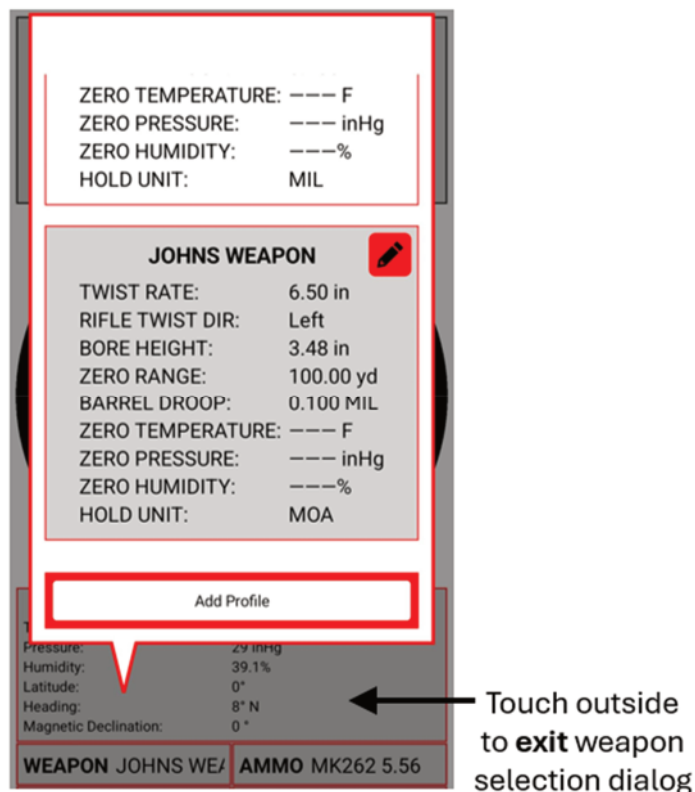
Leave blank.
[Will be set during the weapon zero operation]

3. Input the *BORE HEIGHT*, measured from the weapon bore to the LPVO barrel center.



4. *BARREL DROOP, ZERO RANGE, ZERO TEMPERATURE, ZERO PRESSURE and ZERO HUMIDITY* will be adjusted during a weapon zeroing event. See section *Weapon Zeroing and Final LPVO Alignment* on page 36.
5. When complete, select the *Okay* button to create a new profile.

Example of a successful **new** weapon profile:



ZERO TEMPERATURE: --- F
ZERO PRESSURE: --- inHg
ZERO HUMIDITY: --- %
HOLD UNIT: MIL

JOHNS WEAPON

TWIST RATE: 6.50 in
RIFLE TWIST DIR: Left
BORE HEIGHT: 3.48 in
ZERO RANGE: 100.00 yd
BARREL DROOP: 0.100 MIL
ZERO TEMPERATURE: --- F
ZERO PRESSURE: --- inHg
ZERO HUMIDITY: --- %
HOLD UNIT: MOA

Add Profile

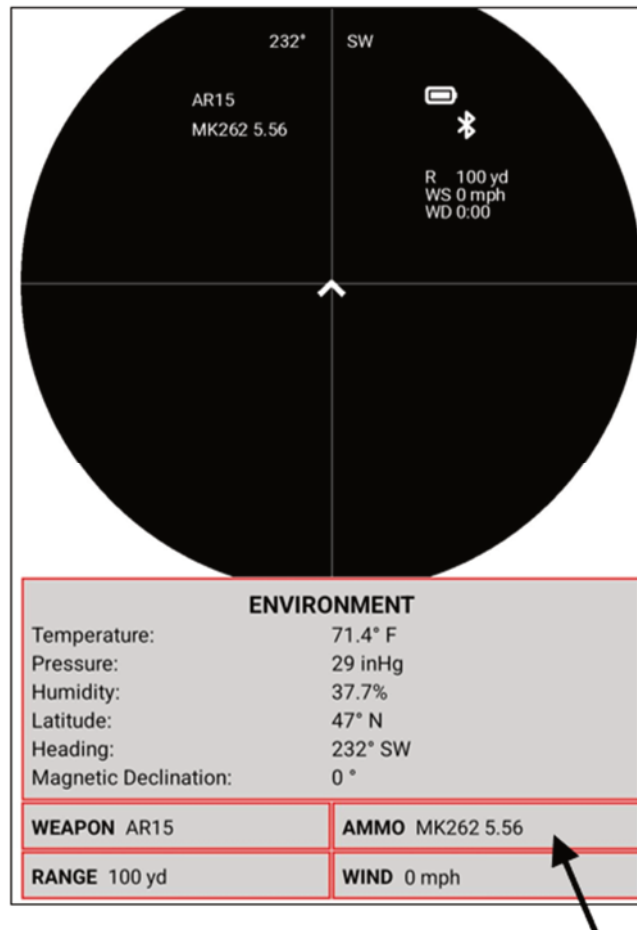
Pressure: 29 inHg
Humidity: 39.1%
Latitude: 0°
Heading: 8° N
Magnetic Declination: 0°

WEAPON JOHNS WE **AMMO** MK262 5.56

Touch outside to exit weapon selection dialog

Select Ammo Profile:

1. Select the *AMMO* button to open the weapons profile list.

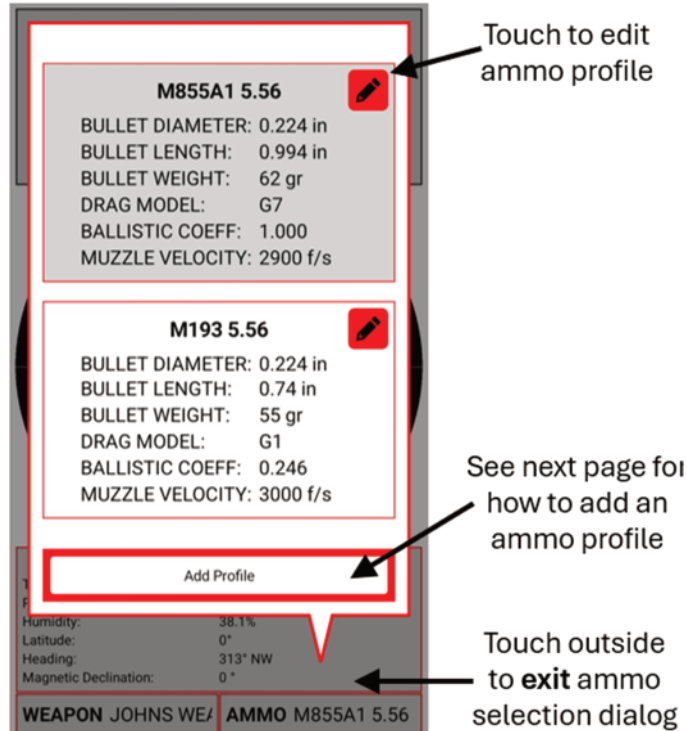


Touch here to select your ammunition.

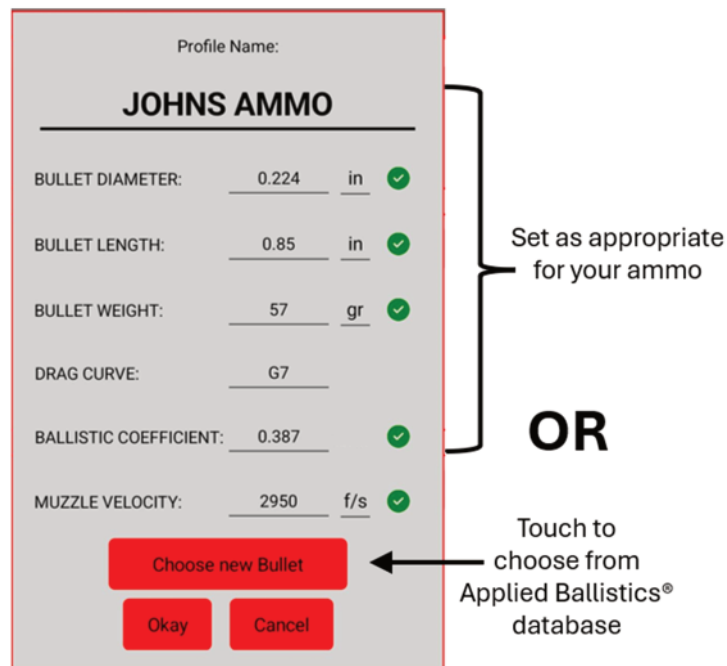
2. Scroll through and select one of the pre-configured ammunition profiles already available.
3. Select the desired weapon profile and verify the profile is shown in the *AMMO* button.

Add Ammunition Profile:

1. From the ammunition profile list, select the Add Profile button.

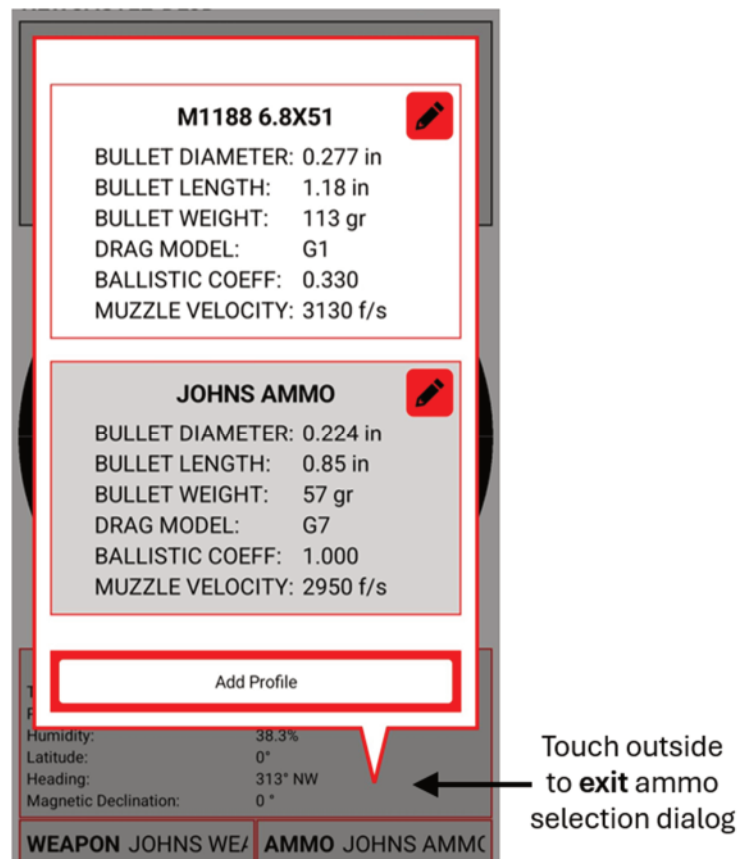


2. Try finding your ammunition in the Applied Ballistics® database before manually entering any information by pressing the *Choose New Bullet* button.



3. If your ammunition is not in the Applied Ballistics® database, input your ammunition information. Input the *Profile Name*, *BULLET MANUFACTURER*, *BULLET LENGTH*, *BULLET WEIGHT*, *DRAG CURVE*, *BALLISTIC COEFFICIENT* from the ammunition manufacturer.
4. For best results, use a chronograph to measure your *muzzle velocity*. Otherwise, use your ammunition manufacturer's information or online references.
5. When complete, select the *Okay* button to create a new profile.

Example of a successful new ammunition profile:



M1188 6.8X51

BULLET DIAMETER: 0.277 in
BULLET LENGTH: 1.18 in
BULLET WEIGHT: 113 gr
DRAG MODEL: G1
BALLISTIC COEFF: 0.330
MUZZLE VELOCITY: 3130 f/s

JOHNS AMMO

BULLET DIAMETER: 0.224 in
BULLET LENGTH: 0.85 in
BULLET WEIGHT: 57 gr
DRAG MODEL: G7
BALLISTIC COEFF: 1.000
MUZZLE VELOCITY: 2950 f/s

Add Profile

Humidity: 38.3%
Latitude: 0°
Heading: 313° NW
Magnetic Declination: 0°

WEAPON JOHNS WE/ AMMO JOHNS AMMO

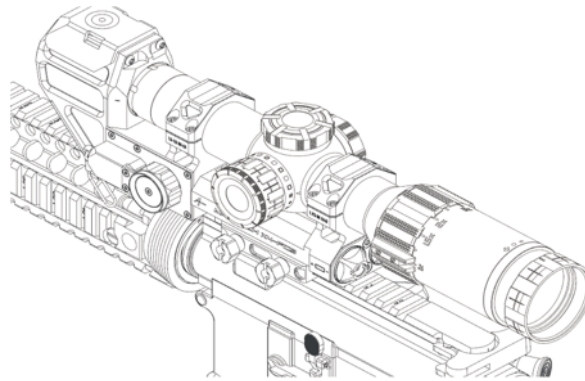
Touch outside to exit ammo selection dialog

WEAPON ZEROING AND FINAL LPVO ALIGNMENT

Weapon Zeroing

Now that you have set your ballistic profiles and your LPVO and X4-FCS™ are properly mounted on your weapon, head to the range and zero your LPVO using your scope manufacturer's instructions.

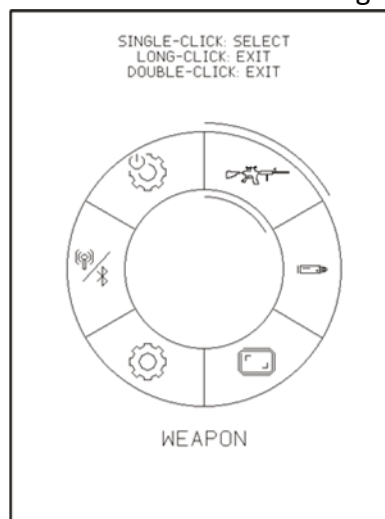
- **Note:** Maztech recommends to zero at 100 yards.



- **Hint:** Turn off the X4-FCS™ (see section *Power Settings* on page 90) during LPVO zeroing to remove X4-FCS™ symbols from your field of view.

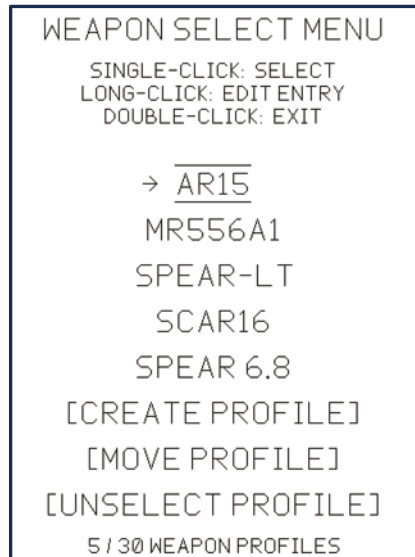
Immediately after zeroing your LPVO, ensure your X4-FCS™ is ON and utilize it to capture the current temperature, pressure, and humidity for enhanced zeroing data:

1. Click and hold (for 1 second) the X4-FCS™ button to bring up the main menu:

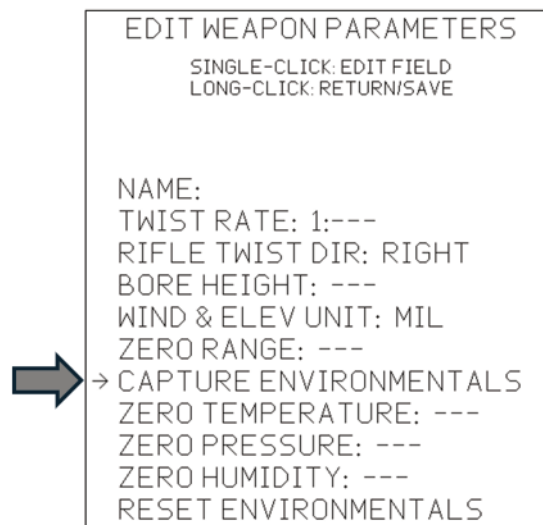


2. Then, click the X4-FCS™ button again to select the *WEAPON* menu.

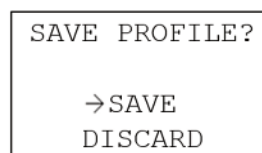
3. Click and hold (for 1 second) the X4-FCS™ button to EDIT your selected weapon:



4. Rotate the X4-FCS™ knob to select *CAPTURE ENVIRONMENTALS*. Click to initiate capture:

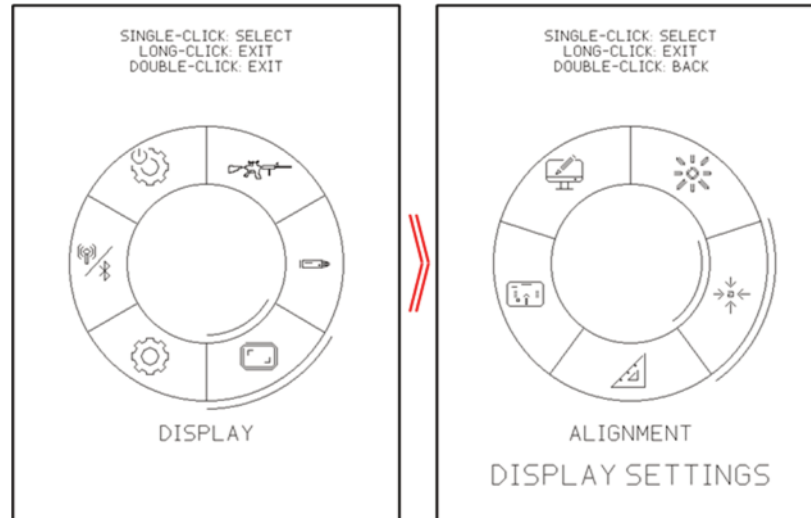


5. Click and hold (for 1 second) the X4-FCS button and click again to confirm:

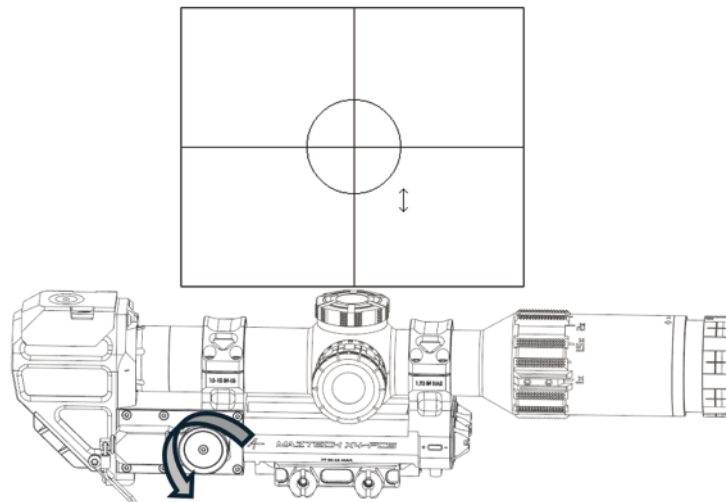


Final LPVO Alignment

6. Now, navigate back to the display alignment screen via the *DISPLAY* menu:



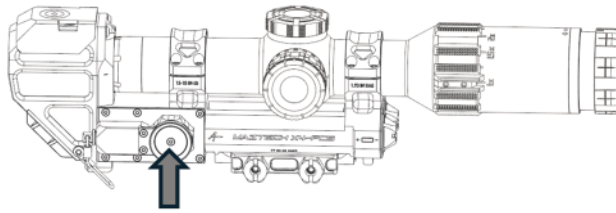
7. Use the X4-FCS™ knob to ensure the X4-FCS™ crosshairs to align with your LPVO reticle:



Single-clicking the X4-FCS™ button will toggle between knob functions:

- ❖ Left-Right
- ❖ Up-Down

➤ **Important:** During this final alignment, adjust your LPVO to the maximum zoom level possible (that still allows you to properly see both reticles).

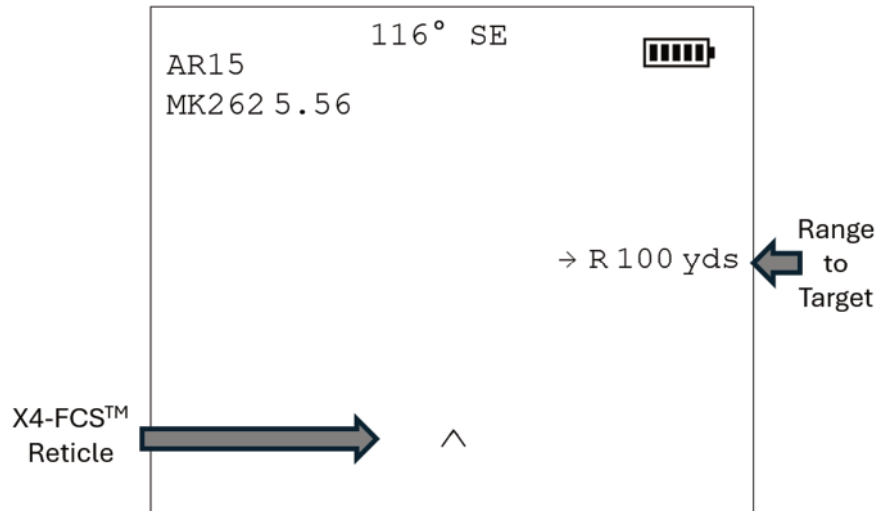


8. Click and hold (for 1 second) the X4-FCS™ button to save the alignment settings.
 9. Safely discharge 2 or 3 rounds from your weapon and ensure the reticles remain aligned.
- **Hint:** At your 100-yard zeroing target, the X4-FCS™ reticle (see section *Using the X4-FCS™ Reticle* on page 40) should also align to your LPVO reticle. If it needs to be adjusted again, you can return to the display alignment screen to re-adjust.
- **Tip:** X4-FCS™ compass calibration can be further optimized by safely rotating your weapon per the instructions in section *X4-FCS™ Compass Calibration*

USING THE X4-FCS™ RETICLE

The X4-FCS™ reticle will give you a calculated aimpoint based on:

- ✓ X4-FCS™ environmental and motion sensors
- ✓ X4-FCS™ ballistics settings
- ✓ Range to target



Adjusting range to target:

- a. From the main screen, double-click the X4-FCS™ button to position the arrow next to the (R)ange distance and click on the X4-FCS™ button.
- b. Rotate the knob to dial in the range distance. While aiming at the target, click on the button update the range and take a measurement of the pitch and cant. The reticle will adjust to the updated range.
- c. Another option for inputting the range is by integrating the X4-FCS™ with an X4-LRF™ laser range finder, sold separately, to allow for instant target distance ranging. Visit www.MaztechIndustries.com for more information or by scanning this QR code with your smartphone or tablet:





Adjusting Wind Speed and Direction:

- a. If wind adjustment is desired, enable the wind input symbology. See section *Menu System and Features >> System Display Setting >> Symbology Ballistics Display Setting >> Wind input Symbology* on page 77.
- b. To adjust the wind speed, from the main screen, double-click the X4-FCS™ button to position the arrow next to the (WS) wind speed and click the X4-FCS™ button. Rotate the knob to dial in the wind speed input and click the X4-FCS™ button to set the wind speed.
- c. To adjust the wind direction, from the main screen, double-click the X4-FCS™ button to position the arrow next to the (WD) wind direction and click the X4-FCS™ button. Rotate the knob to dial in the wind direction input and click the X4-FCS™ button to set the wind direction.
- d. The reticle will now adjust to the updated wind speed and/or direction.

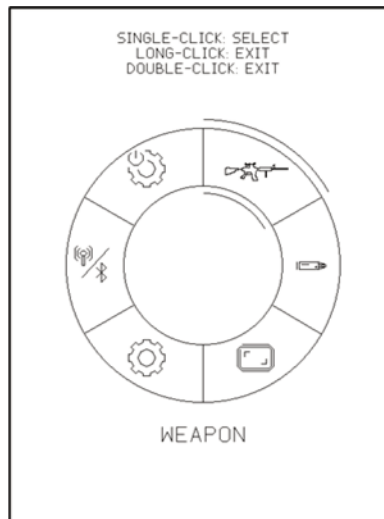
SETTING UP BALLISTIC PROFILES (WITHOUT SMARTPHONE)

Weapon Profile Setting

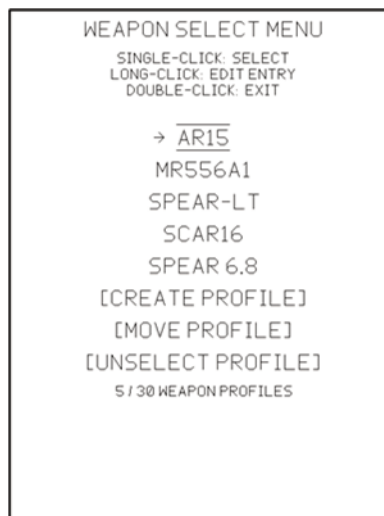
The X4-FCS has the capability of selecting and customizing up to 30 different weapons profiles.

Select Weapon Profile:

1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the *WEAPON* menu, then click the X4-FCS™ button to select.

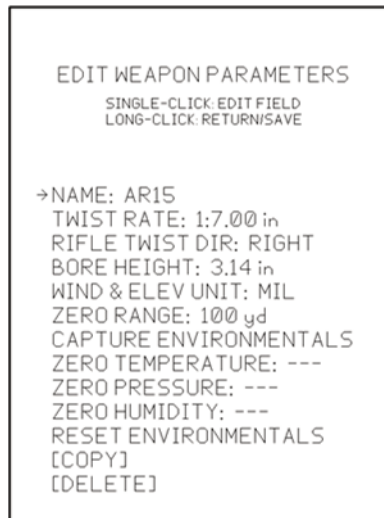


3. Rotate the knob to navigate to the desired weapons profile, then click the X4-FCS™ button to select.



Configure Weapon Profile:

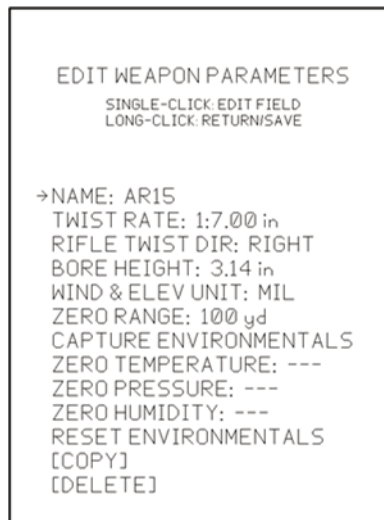
1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the *WEAPON* menu, then click the X4-FCS™ button to select.
3. Rotate the knob to navigate to the desired weapons profile, then click and hold (for 1 second) the X4-FCS™ button to edit the weapon profile parameters.
4. Rotate the knob to navigate to the desired weapons parameter to edit, then click the X4-FCS™ button to edit.



5. To use current environmental conditions as the Zero Environment, rotate the knob to navigate to *CAPTURE ENVIRONMENTAL*, then click the X4-FCS™ button. The *ZERO TEMPERATURE*, *ZERO PRESSURE*, *ZERO HUMIDITY* will update with the current environmental measurements.
6. Click and hold (for 1 second) the X4-FCS™ button to save current weapon parameters.
7. Click the X4-FCS™ button to confirm the saving of the profile.

Copy Weapon Profile:

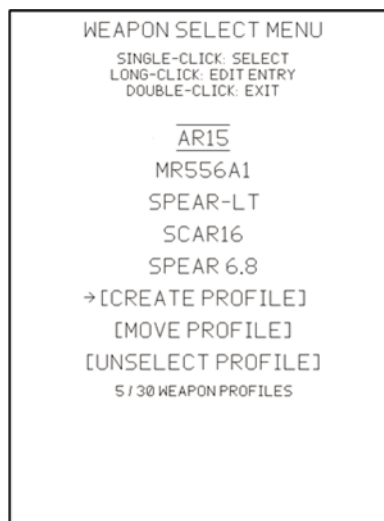
1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the WEAPON menu, then click the X4-FCS™ button to select.
3. Rotate the knob to navigate to the desired weapons profile to copy, then click and hold (for 1 second) the X4-FCS™ button to edit the weapon profile parameters.
4. Rotate the knob to navigate to [COPY], then click the X4-FCS™ button.



5. Navigate to the profile name, then click the X4-FCS™ button to edit weapon profile name. Edit the name to a unique profile name.
6. Configure the weapon profile.
7. Click and hold (for 1 second) the X4-FCS™ button to save current weapon parameters.
8. Click the X4-FCS™ button to confirm the saving of the profile.

Create New Weapon Profile:

1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the *WEAPON* menu, then click the X4-FCS™ button to select.
3. Rotate the knob to navigate to *[CREATE PROFILE]*, then click and hold (for 1 second) the X4-FCS™ button to create a new weapon profile.



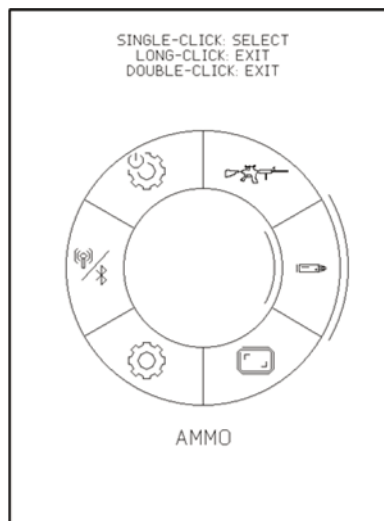
4. Configure the weapon profile.
5. Click and hold (for 1 second) the X4-FCS™ button to save current weapon profile.
6. Click the X4-FCS™ button to confirm the saving of the profile.

Ammo Profile Setting

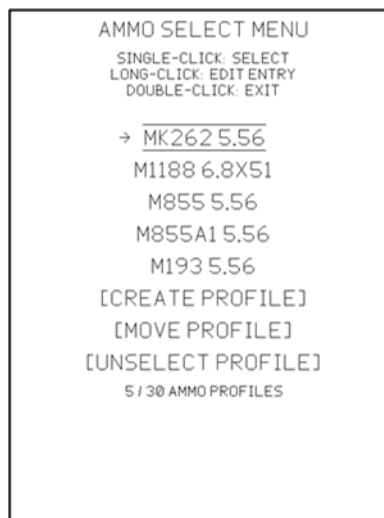
The X4-FCS has the capability of selecting and customizing up to 30 different ammo profiles.

Select Ammo Profile:

1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the *AMMO* menu, then click the X4-FCS™ button to select.

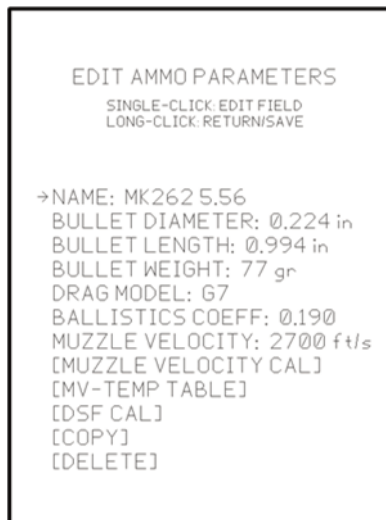


3. Rotate the knob to navigate to the desired ammo profile, then click the X4-FCS™ button to select.



Configure Ammo Profile:

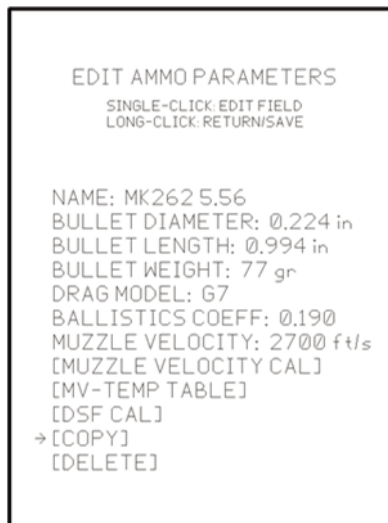
1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the *AMMO* menu, then click the X4-FCS™ button to select.
3. Rotate the knob to navigate to the desired ammo profile, then click and hold (for 1 second) the X4-FCS™ button to edit the ammo profile parameters.
4. Rotate the knob to navigate to the desired ammo parameter to edit, then click the X4-FCS™ button to edit.



5. Click and hold (for 1 second) the X4-FCS™ button to save current ammo parameters.
6. Click the X4-FCS™ button to confirm the saving of the profile.

Copy Ammo Profile:

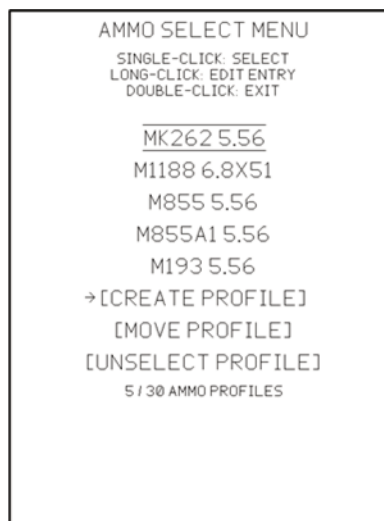
1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the *AMMO* menu, then click the X4-FCS™ button to select.
3. Rotate the knob to navigate to the desired ammo profile to copy, then click and hold (for 1 second) the X4-FCS™ button to edit the ammo profile parameters.
4. Rotate the knob to navigate to *[COPY]*, then click the X4-FCS™ button.



5. Navigate to the profile name, then click the X4-FCS™ button to edit ammo profile name. Edit the name to a unique profile name.
6. Configure the ammo profile.
7. Click and hold (for 1 second) the X4-FCS™ button to save current ammo parameters.
8. Click the X4-FCS™ button to confirm the saving of the profile.

Create New Ammo Profile:

1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the *AMMO* menu, then click the X4-FCS™ button to select.
3. Rotate the knob to navigate to *[CREATE PROFILE]*, then click and hold (for 1 second) the X4-FCS™ button to create a new ammo profile.



4. Configure the weapon profile.
5. Click and hold (for 1 second) the X4-FCS™ button to save current ammo profile.
6. Click the X4-FCS™ button to confirm the saving of the profile.

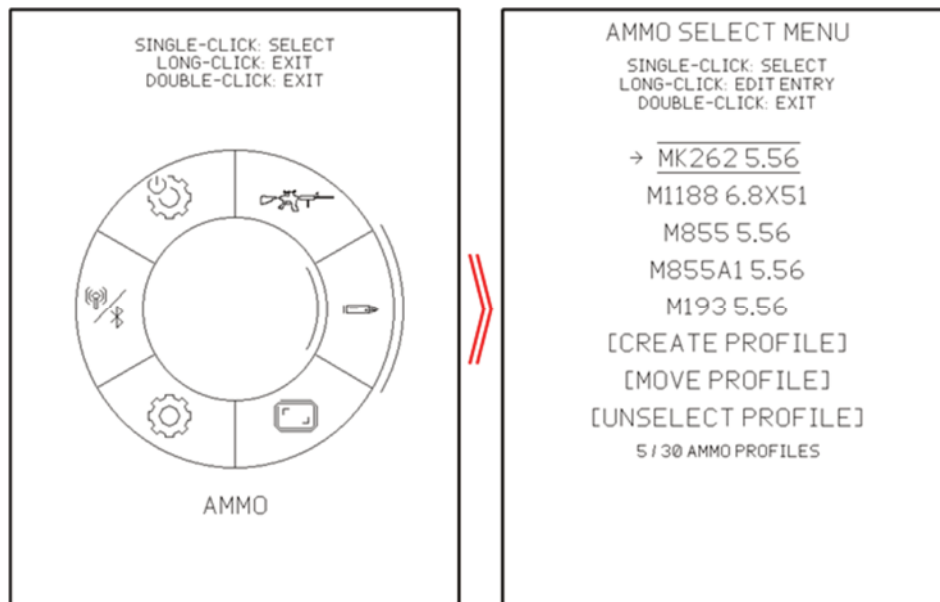
ADVANCED BALLISTIC SETTINGS

- **Tip:** To increase the ballistics calculator accuracy, you can adjust the current latitude, magnetic declination and environmental reading settings. See *section Menu System and Features >> System Setting* on page 80.

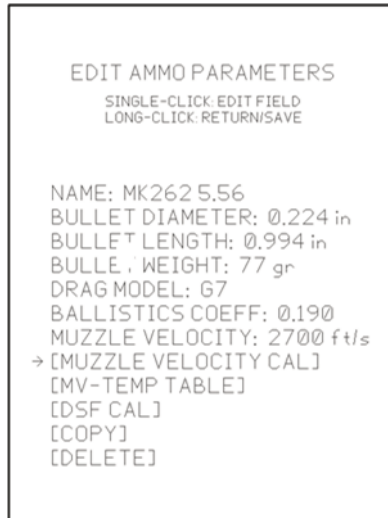
Muzzle Velocity Calculator

To get an accurate ballistics calculation, an accurate muzzle velocity is needed. It is recommended to use a chronograph to measure the muzzle velocity, but alternatively, you may use the X4-FCS™ internal muzzle velocity calculator to compare predicted drop with actual bullet drops.

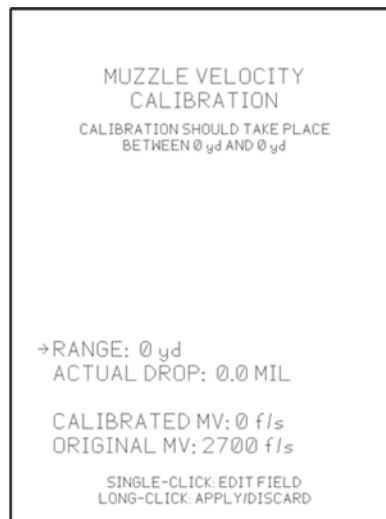
1. After selecting the weapon profile, ammo profile and adjusting for windage, navigate to the *MUZZLE VEL CAL* page.
2. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
3. Rotate the knob to navigate to the *AMMO* menu, then click the X4-FCS™ button to select.
4. Rotate the knob to navigate to the desired ammo profile, then click and hold (for 1 second) the X4-FCS™ button to edit.



5. Rotate the knob to navigate to [MUZZLE VELOCITY CAL], then click the X4-FCS™ button to select.



6. In the *MUZZLE VELOCITY CALIBRATION* screen, the optimum recommended target range is displayed. Set up a target between the indicated Muzzle Velocity Cal range.



7. With the reticle pointed at the center of the target (with no ballistics calculator correction), fire a group at the target.
8. Accurately measure the vertical drop from the point of aim to the center of the fired grouping.
9. Navigate back to the *MUZZLE VELOCITY CALIBRATION* screen and input the range and actual bullet drop. The calibrated muzzle velocity will be updated on the screen. Use this calculator to adjust the Ammo Muzzle Velocity and [MV Temp Table] settings. See page 47.

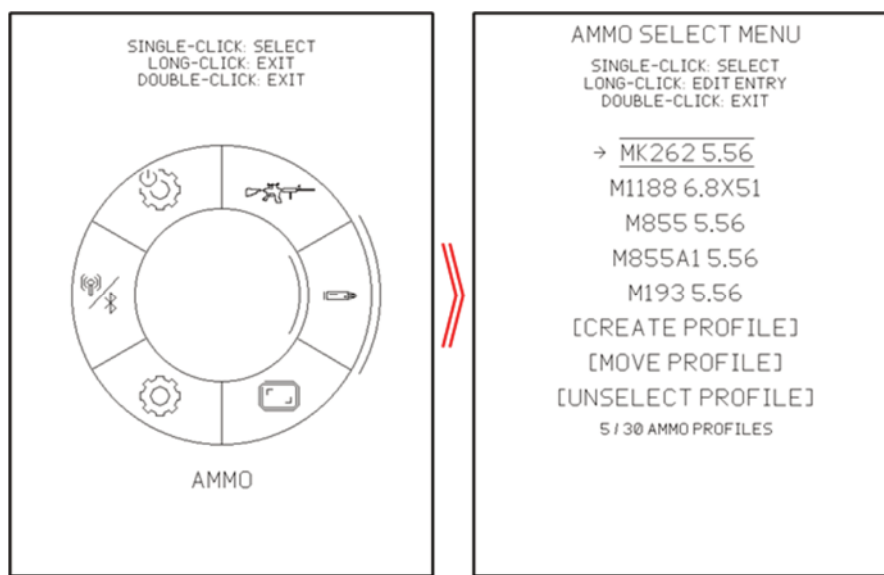


10. Click and hold (for 1 second) the X4-FCS™ button to save the Muzzle velocity to the ammo profile then click the X4-FCS™ button to confirm the changes. If using the muzzle velocity calculator for setting the *[MV Temp Table]*, discard the changes and the ammo muzzle velocity will not update.
11. Click and hold (for 1 second) the X4-FCS™ button to save the ammo profile then click the X4-FCS™ button to confirm the changes
12. Click the X4-FCS™ button to select the profile.
13. After adjusting the muzzle velocity, use the X4-FCS™ to take another ballistics solution at a different known range. Fire at the target with the ballistics calculation and verify the accuracy of the calculation with the new settings. You may need to refine the muzzle velocity adjustment at a different range distance, especially if you observe inconsistencies across varying distances.

MV Temp tables

Calibrating the Muzzle Velocity Temp may be a crucial step in achieving accurate long-range ballistics compensation calculations across varying temperatures. Propellant in ammunition are sensitive to temperature. Increase in cartridge temperature allows for the propellant to burn more efficiently, while colder propellant temperature decreases the burn rate. This change in efficiency can vary the muzzle velocity across temperatures.

1. For each temperature test point, acclimate the temperature of the ammunition for at least 2 hours to make sure the internal temperature is stable. It is recommended to calibrate the temperature table with at least three different temperature points.
 - Cold temperature: You can place the ammunition in a refrigerator/freezer or a cooler with ice. Make sure the ammunition is not directly touching the ice or liquid in the cooler.
 - Moderate temperature: This can be the ambient temperature in the shade.
 - Hot temperature: This can be done by placing your ammunition in a safe location, in the sun. It is not recommended to place the ammunition in direct sunlight, in a confined space such as in a car, as it can be extremely dangerous.
2. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
3. Rotate the knob to navigate to the AMMO menu, then click the X4-FCS™ button to select.
4. Rotate the knob to navigate to the desired ammo profile, then click and hold (for 1 second) the X4-FCS™ button to edit.



5. Rotate the knob to navigate to [MUZZLE VELOCITY CAL], then click the X4-FCS™ button to select.

EDIT AMMO PARAMETERS

SINGLE-CLICK: EDIT FIELD
LONG-CLICK: RETURN/SAVE

NAME: MK262 5.56
BULLET DIAMETER: 0.224 in
BULLET LENGTH: 0.994 in
BULLET WEIGHT: 77 gr
DRAG MODEL: G7
BALLISTICS COEFF: 0.190
MUZZLE VELOCITY: 2700 ft/s
[MUZZLE VELOCITY CAL]
→ [MV-TEMP TABLE]
[DSF CAL]
[COPY]
[DELETE]

6. To enable the MV-Temp Table calibration, use the knob to navigate to the *ENABLED* option, then click the X4-FCS™ button to select. Click the X4-FCS™ button again to turn the correction *ON*.

MV-TEMP TABLE

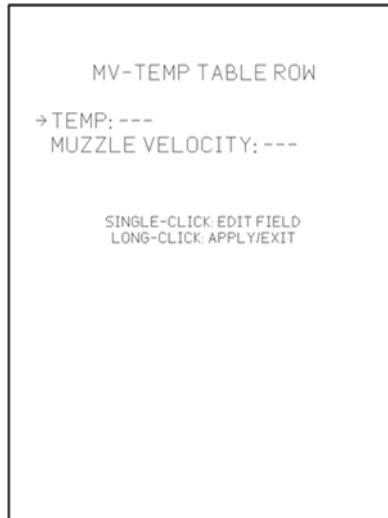
→ENABLED: NO
TEMP UNIT: °F
MV UNIT: f/s

TEMP (°F)	MV (f/s)
---	---
---	---
---	---
---	---
---	---
---	---

SINGLE-CLICK: EDIT FIELD
LONG-CLICK: APPLY/DISCARD

7. Rotate the knob to navigate to a desired MV-Temp table row, then click the X4-FCS™ button to select.

8. Use the knob to navigate to a desired setting, then click the X4-FCS™ button to update the setting.

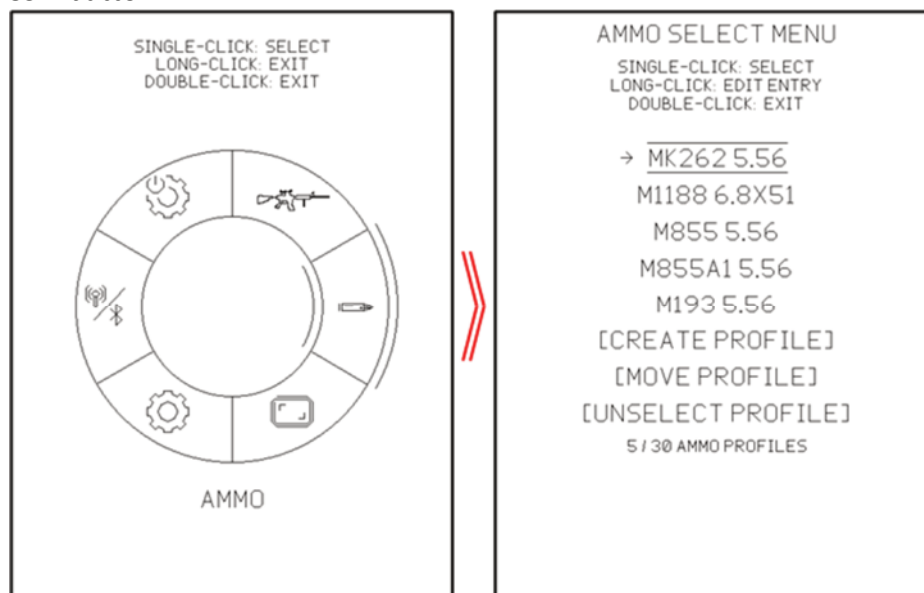


9. Use the knob to change the value and the X4-FCS™ button to change the setting parameter. Click and hold (for 1 second) the X4-FCS™ button to save the parameter setting. Click the X4-FCS™ button to confirm the changes.
10. Click and hold (for 1 second) the X4-FCS™ button to save the MV-Temp table row. Click the X4-FCS™ button to confirm the changes.
11. Click and hold (for 1 second) the X4-FCS™ button to save the MV-Temp table. Click the X4-FCS™ button to confirm the changes.
12. Click and hold (for 1 second) the X4-FCS™ button to save the ammo profile. Click the X4-FCS™ button to confirm the changes.
13. Click the X4-FCS™ button to select the profile.

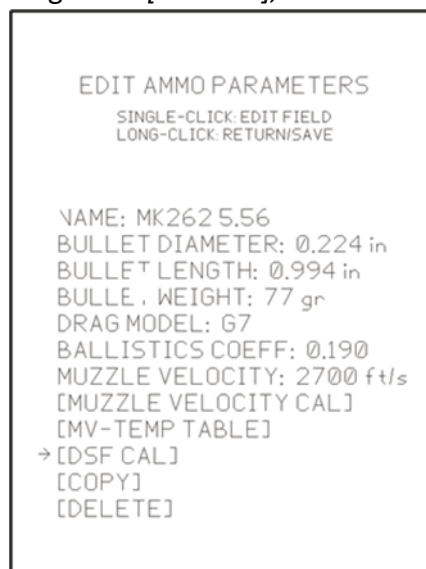
Drop Scale Factor Correction

For long ranges shooting, where the bullet slows down significantly, the Drop Scale Factor (DSF) is used to adjust the predicted bullet drop with the actual observed bullet drop. The DSF scales the ballistics model to better match your specific ammunition and firearm.

1. Click and hold (for 1 second) the X4-FCS™ button. This will display the X4-LRF™ menu.
2. Use the knob to navigate to the *AMMO SELECT* menu then click the X4-FCS™ button to select.
3. Use the knob to navigate to the desired ammo profile, then click and hold (for 1 second) the X4-FCS™ button.



4. Use the knob buttons to navigate to *[DSF CAL]*, then click the X4-FCS™ button to select.



5. In the *DSF CALIBRATION ENTRY* screen, the optimum recommended target range is displayed. Set up a target around the indicated DSF Calibration range.

DSF CALIBRATION ENTRY
CALIBRATION SHOULD TAKE PLACE
AT AROUND 0 yd

→ RANGE: 0 yd
ACTUAL DROP: 0.0 MIL

DSF: --- MACH: 0.000
[CLEAR DSF]

MACH	DSF
0.000	1.000
0.000	1.000
0.000	1.000
0.000	1.000
0.000	1.000
0.000	1.000

SINGLE-CLICK: EDIT FIELD
LONG-CLICK: APPLY/DISCARD

6. With the reticle pointed at the center of the target (with no ballistics calculator correction), fire a group at the target.
7. Measure the vertical bullet drop from the center of the target to the fired grouping.
8. Navigate back to the *DSF CALIBRATION ENTRY* screen and input the range and actual bullet drop. The calibrated ammo speed will be updated on the screen.
9. Click and hold (for 1 second) the X4-FCS™ button to save the DSF calibration Entry to the DSF profile. Click the X4-FCS™ button to confirm the changes.
10. Click and hold (for 1 second) the X4-FCS™ button to save the DSF Calibration Profile. Click the X4-FCS™ button to confirm the changes.
11. Click and hold (for 1 second) the X4-FCS™ button to save the ammo profile. Click the X4-FCS™ button to confirm the changes.
12. Click the X4-FCS™ button to select the profile.

Barrel Droop Adjustment

The X4-FCS™ ballistics calculator is able to compensate for barrel droop, which may be necessary with extreme CANT angles greater than 30°.

1. With the CANT angle at 90° left or right, range a target at a minimum distance of 600yds.
2. Configure the *BARREL DROOP* setting under the Ammo profile to 0.100 MIL. See page 47.
3. Using the ballistics calculated reticle, fire a group at the target.
4. If adjustment to the barrel droop is needed, adjust the *BARREL DROOP* setting under the Ammo profile to correct for the vertical drop, retest and readjust. See page 47.

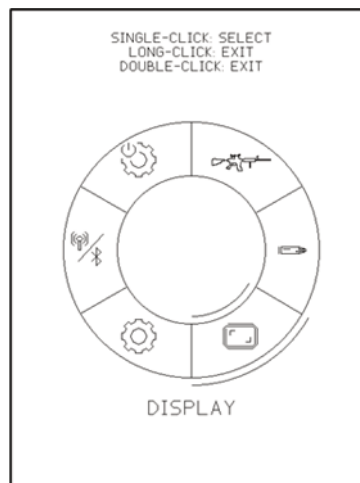
MENU SYSTEM AND FEATURES

System Display Settings

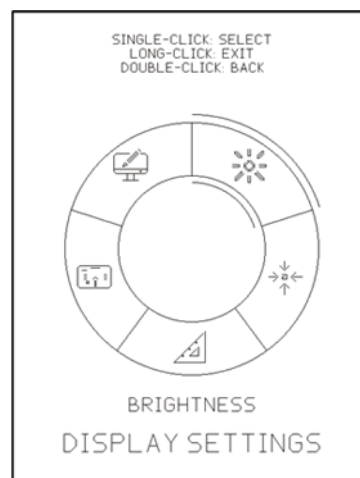
The X4-FCS has the capability of adjusting how the information is displayed, such as system units, ballistics information, etc. The display settings are also where the system reticle alignment is adjusted.

Adjust Display Brightness:

1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the *DISPLAY* menu, then click the X4-FCS™ button to select.



3. Rotate the knob to navigate to the *BRIGHTNESS* menu, then click the X4-FCS™ button to select.



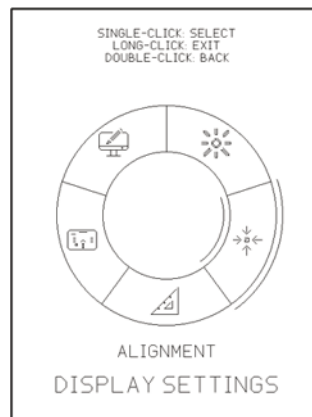
4. Rotate the knob to adjust the display brightness, then click the X4-FCS™ button to set.



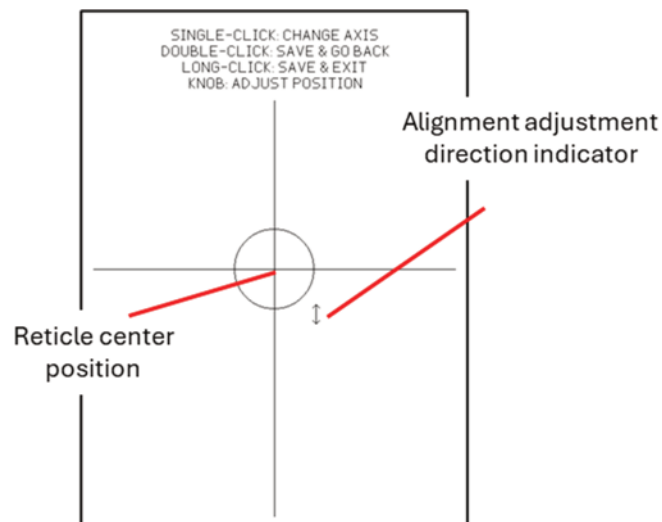
Adjust Reticle Alignment

The X4-FCS™ is capable of digitally adjusting the horizontal and vertical alignment of the reticle. Rotational alignment is performed mechanically (see LPVO Initial Alignment).

1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the *DISPLAY* menu, then click the X4-FCS™ button to select.
3. Rotate the knob to navigate to the *ALIGNMENT* menu, then click the X4-FCS™ button to select.



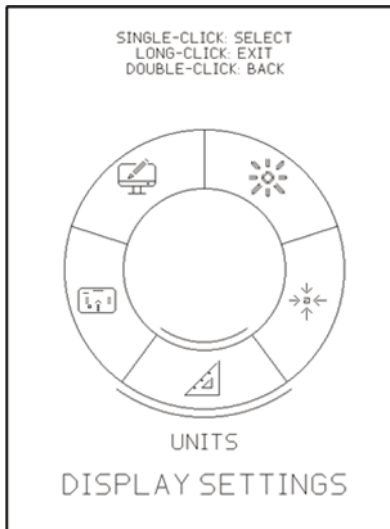
4. Click the X4-FCS™ button to change the axis to be adjusted, between horizontal and vertical as indicated on the screen.



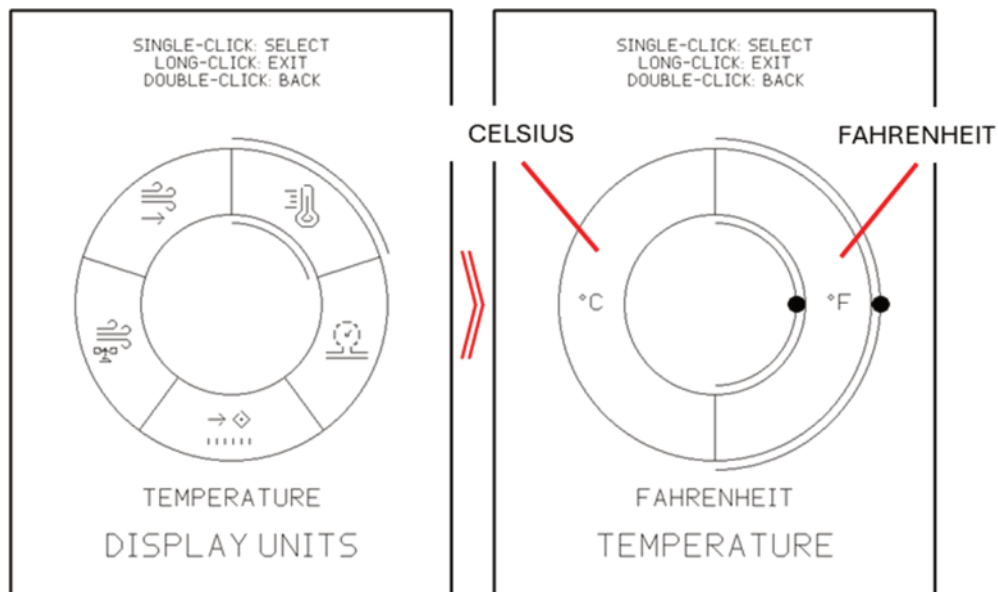
5. Rotate the knob to adjust the reticle alignment.
6. When alignment is complete, Click and hold (for 1 second) the X4-FCS™ button to save.

Units Selection

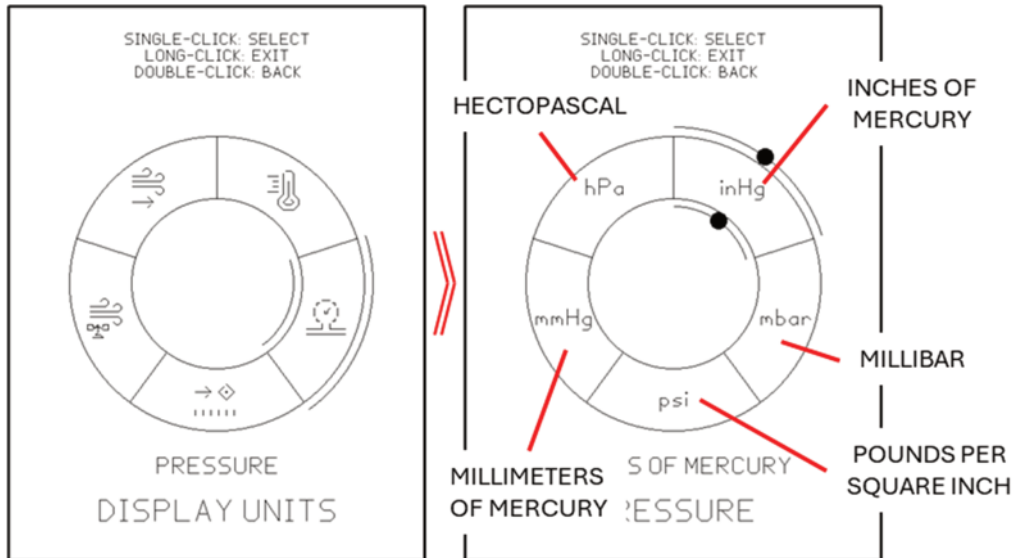
1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the *DISPLAY* menu, then click the X4-FCS™ button to select.
3. Rotate the knob to navigate to the *UNITS* menu, then click the X4-FCS™ button to select.



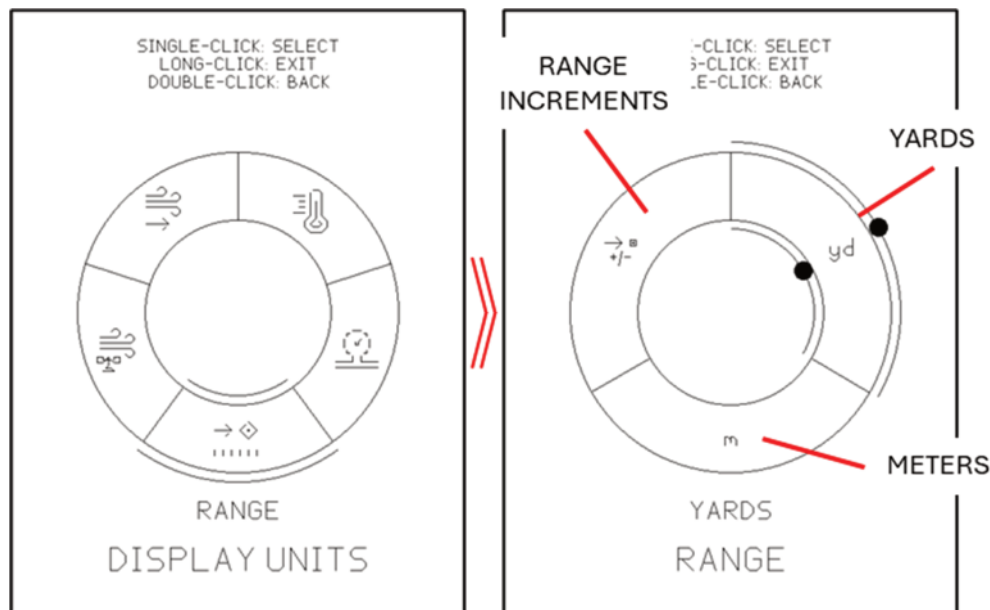
4. To adjust the temperature units, rotate the knob to navigate to the *TEMPERATURE* menu, then click the X4-FCS™ button to select. Rotate the knob to navigate between °F or °C and click the X4-FCS™ button to select.



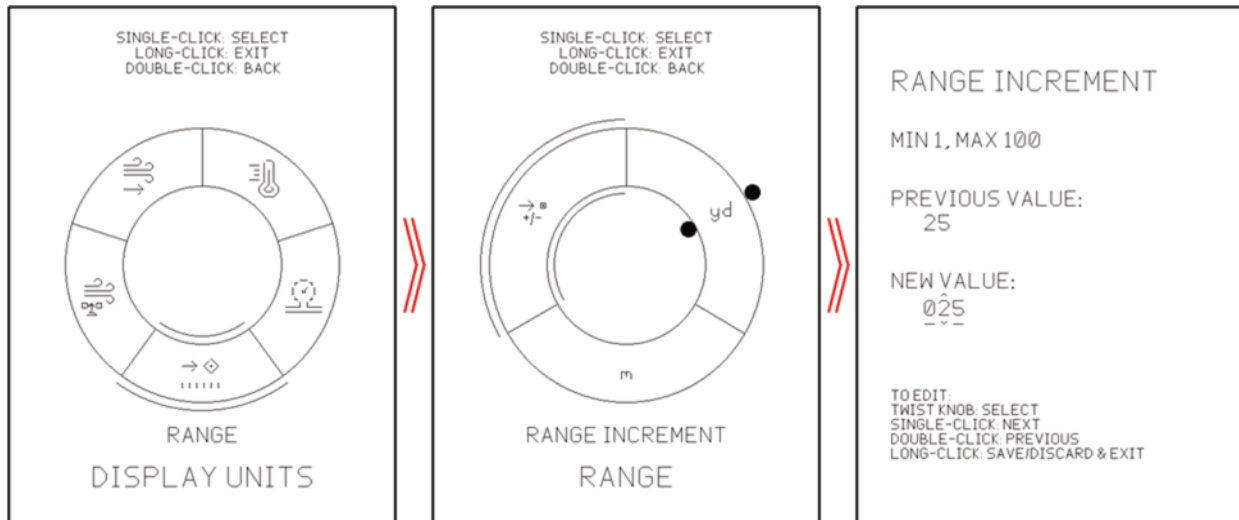
5. To adjust the pressure units, rotate the knob to navigate to the *PRESSURE* menu, then click the X4-FCS™ button to select. Rotate the knob to navigate between Inches of Mercury, Millibar, Pound Per Square Inch, Millimeters of Mercury or Hectopascal and click the X4-FCS™ button to select.



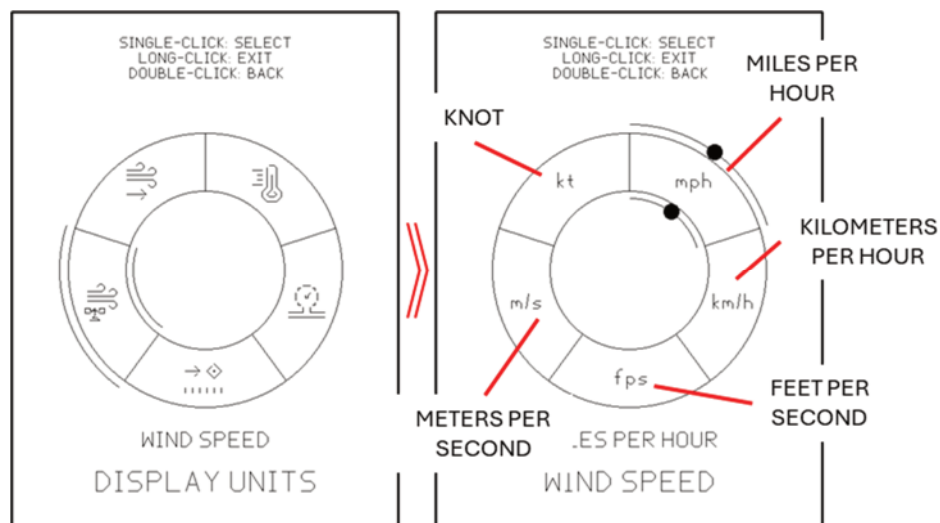
6. To adjust the range units, rotate the knob to navigate to the *RANGE* menu, then click the X4-FCS™ button to select. Rotate the knob to navigate between Yards or Meters and click the X4-FCS™ button to select.



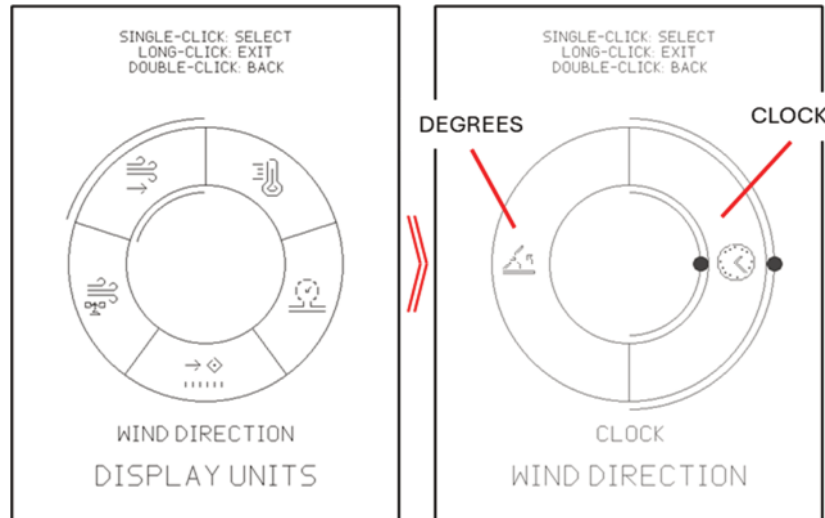
7. To adjust the manual range adjustment increment, rotate the knob to navigate to the *RANGE* menu, then click the X4-FCS™ button to select. Rotate the knob to navigate to *RANGE INCREMENT* and click the X4-FCS™ button to select. Use the button and knob to adjust the manual range adjustment increment and click and hold (for 1 second) the X4-FCS™ button to save current ammo parameters. Click the X4-FCS™ button to confirm.



8. To adjust the wind speed units, rotate the knob to navigate to the *WIND SPEED* menu, then click the X4-FCS™ button to select. Rotate the knob to navigate between *Miles Per Hour*, *Kilometers Per Hour*, *Feet Per Second*, *Meters Per Second* or *Knot* and click the X4-FCS™ button to select.



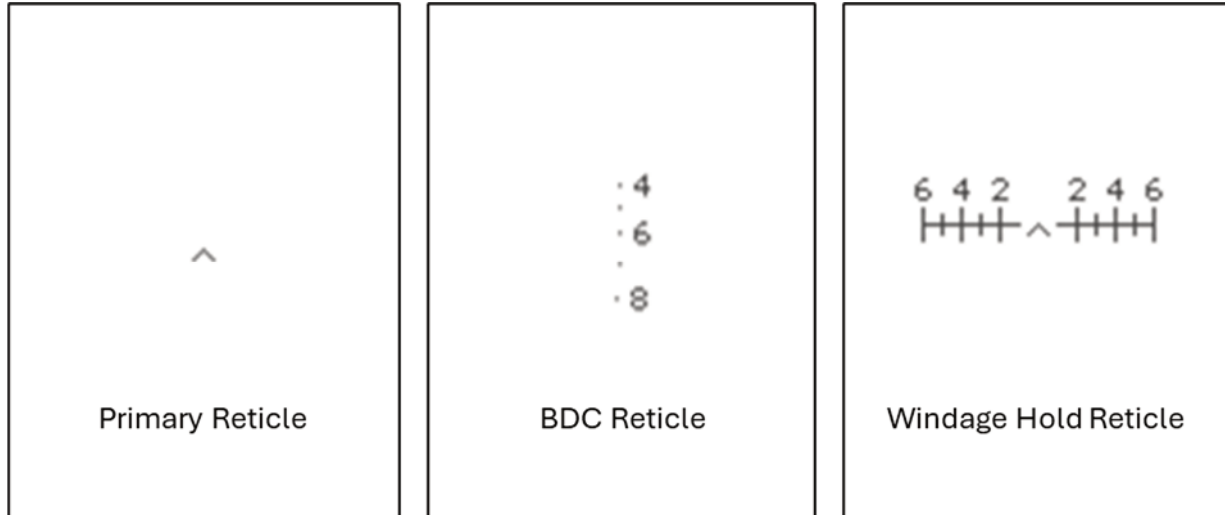
9. To adjust the wind direction units, rotate the knob to navigate to the *WIND DIRECTION* menu, then click the X4-FCS™ button to select. Rotate the knob to navigate between *clock or degrees* and click the X4-FCS™ button to select.



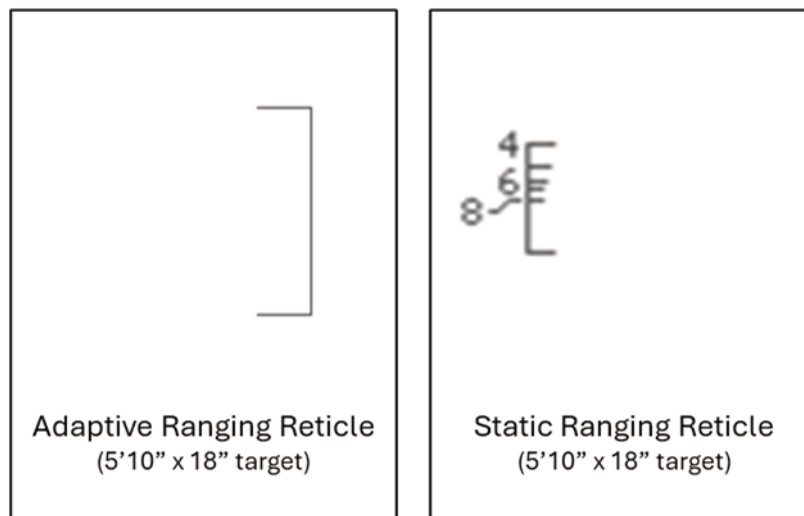
Symbology Reticle Display Setting

The X4-FCS™ is able to display various ballistics compensated reticles as well auto ranging reticles.

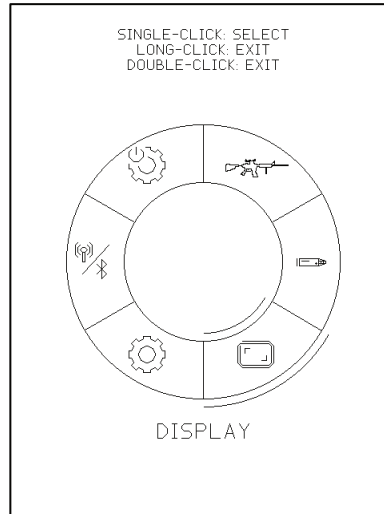
Ballistics Compensated Reticles



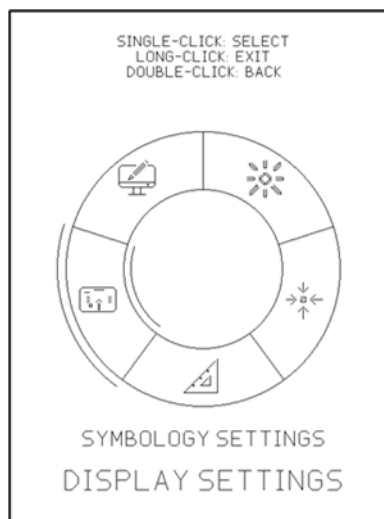
Auto Ranging Reticles



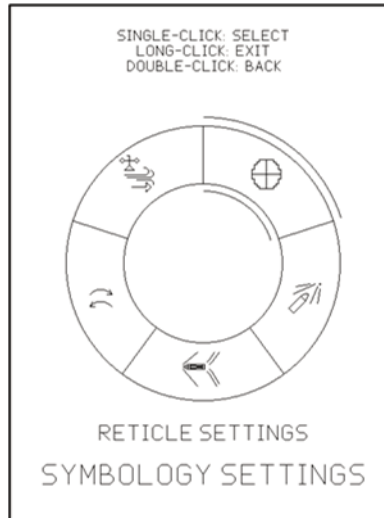
1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the DISPLAY menu, then click the X4-FCS™ button to select.



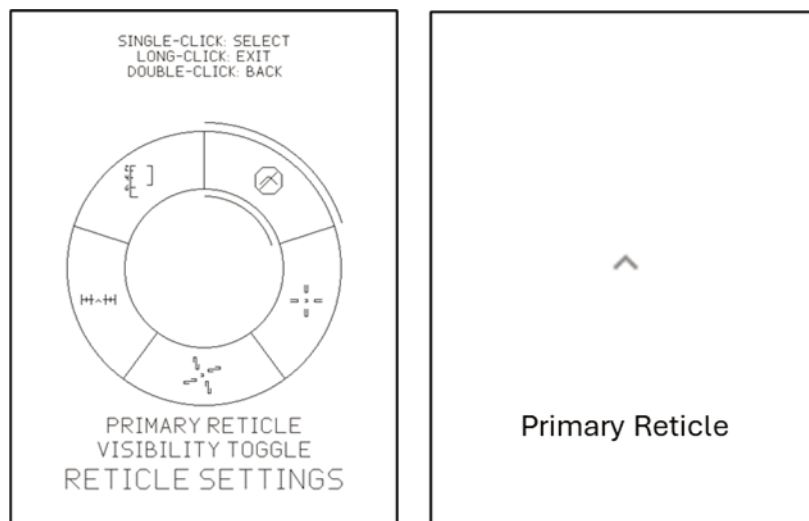
3. Rotate the knob to navigate to the *SYMBOLOLOGY SETTING* menu, then click the X4-FCS™ button to select.



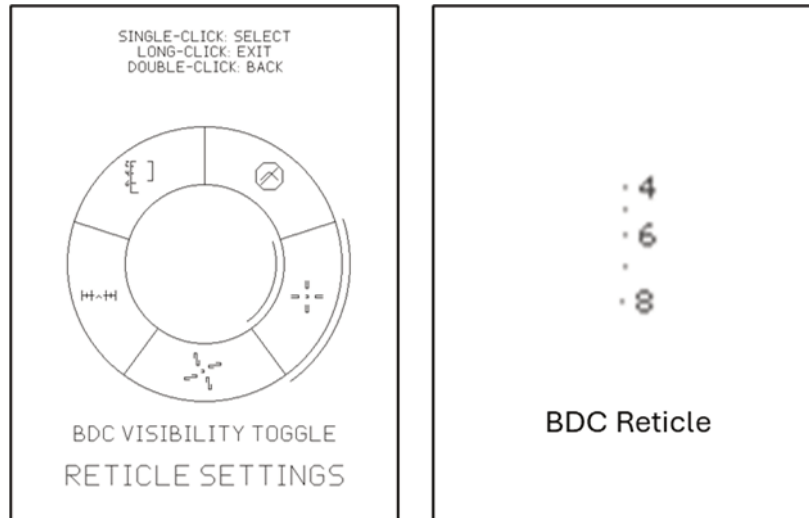
4. Rotate the knob to navigate to the *RETICLE SETTING* menu, then click the X4-FCS™ button to select.



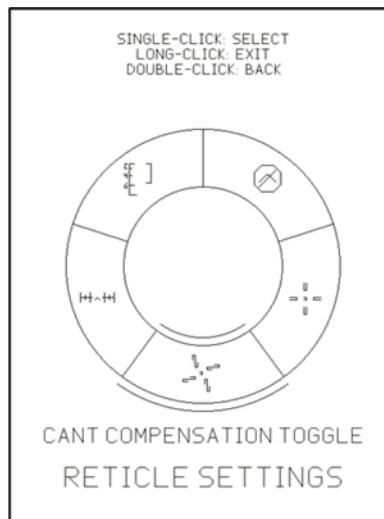
5. To toggle the primary reticle visibility, rotate the knob to navigate to the *PRIMARY RETICLE VISIBILITY TOGGLE* menu, then click the X4-FCS™ button to toggle. The primary reticle is ballistics compensated, taking into account the environment and weapon position.



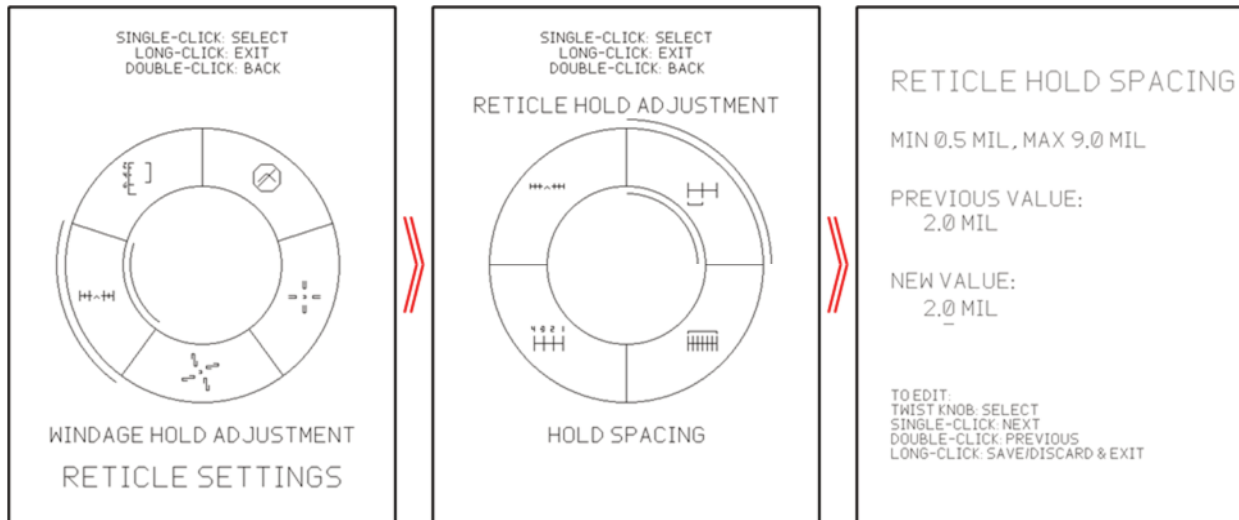
6. To toggle the ballistic drop compensation reticle visibility, rotate the knob to navigate to the *BDC VISIBILITY TOGGLE* menu, then click the X4-FCS™ button to toggle. The BDC reticle is ballistics compensated, taking into account the environment and weapon position.



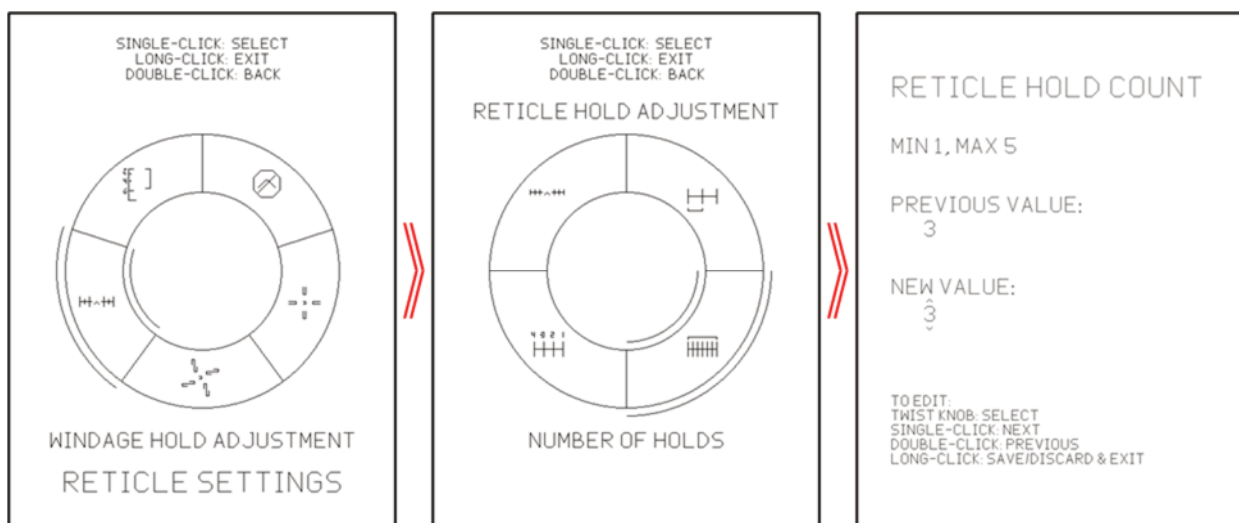
7. To toggle the cant compensation into the ballistics compensation, rotate the knob to navigate to the *CANT COMPENSATION TOGGLE* menu, then click the X4-FCS™ button to toggle.



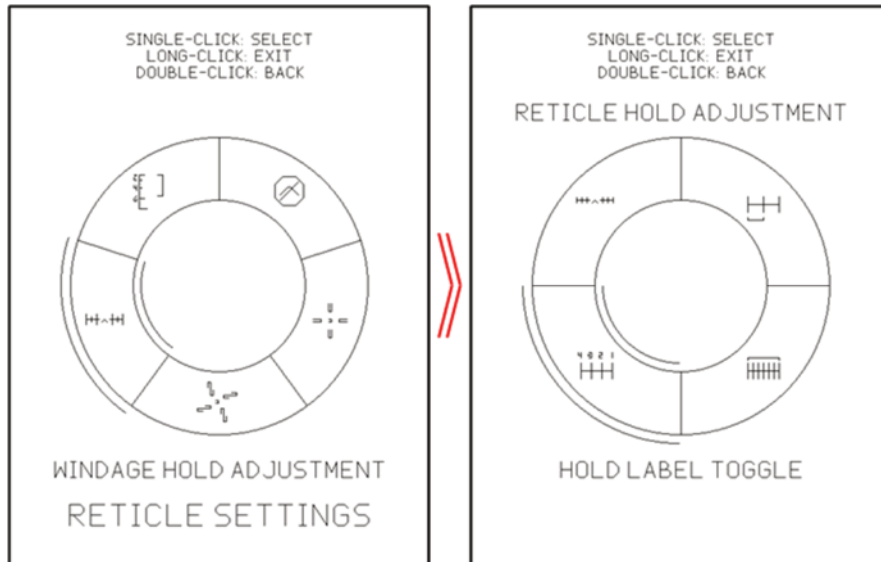
8. To adjust the windage hold spacing, rotate the knob to navigate to the *WINDAGE HOLD ADJUSTMENT* menu, then click the X4-FCS™ button to select. Rotate the knob to navigate to the *HOLD SPACING* menu, then click the X4-FCS™ button to select. Use the button and knob to adjust the hold spacing and click and hold (for 1 second) the X4-FCS™ button to save current parameter. Click the X4-FCS™ button to confirm.



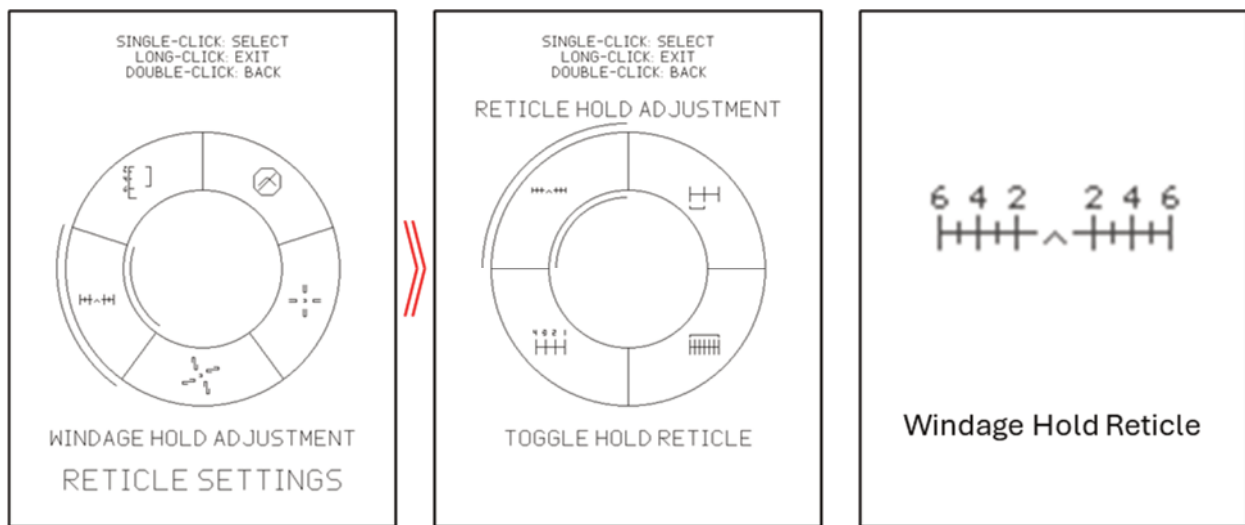
9. To adjust the windage hold count, rotate the knob to navigate to the *WINDAGE HOLD ADJUSTMENT* menu, then click the X4-FCS™ button to select. Rotate the knob to navigate to the *NUMBER OF HOLDS* menu, then click the X4-FCS™ button to select. Use the button and knob to adjust the hold spacing count and click and hold (for 1 second) the X4-FCS™ button to save current parameter. Click the X4-FCS™ button to confirm.



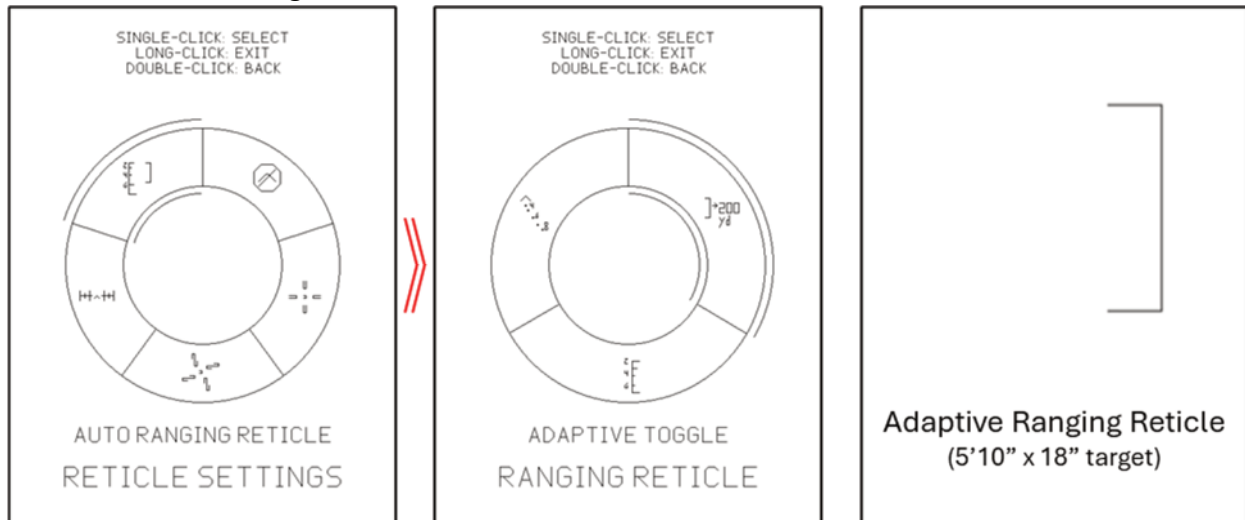
10. To toggle the windage hold reticle label visibility, rotate the knob to navigate to the *WINDAGE HOLD ADJUSTMENT* menu, then click the X4-FCS™ button to select. Rotate the knob to navigate to the *HOLD LABEL TOGGLE* menu, then click the X4-FCS™ button to toggle.



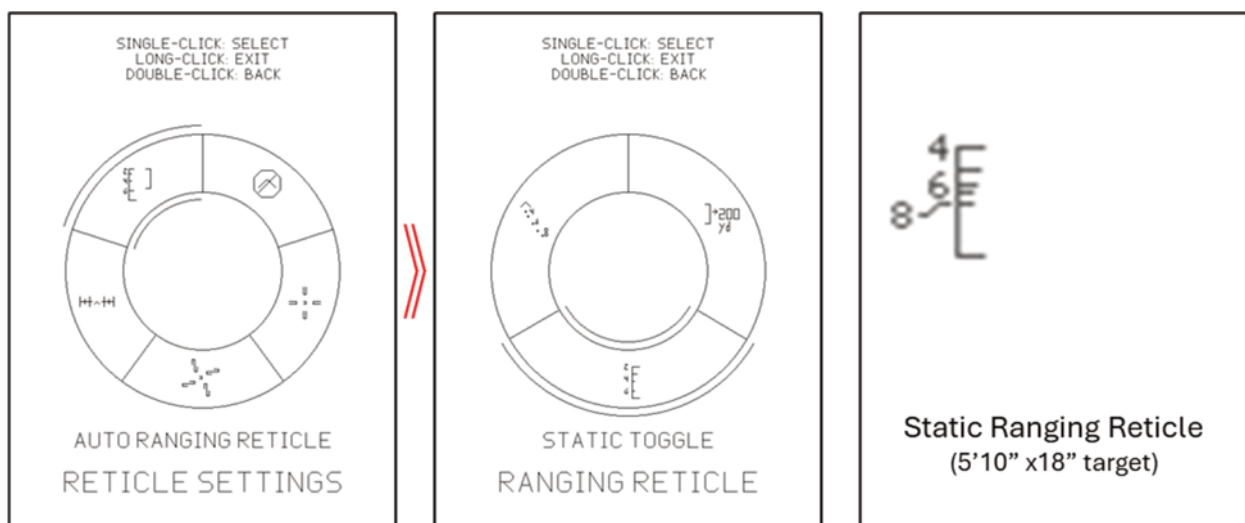
11. To toggle the windage hold reticle visibility, rotate the knob to navigate to the *WINDAGE HOLD ADJUSTMENT* menu, then click the X4-FCS™ button to select. Rotate the knob to navigate to the *TOGGLE HOLD RETICLE* menu, then click the X4-FCS™ button to toggle. The windage hold reticle is ballistics compensated, taking into account the environment and weapon position.



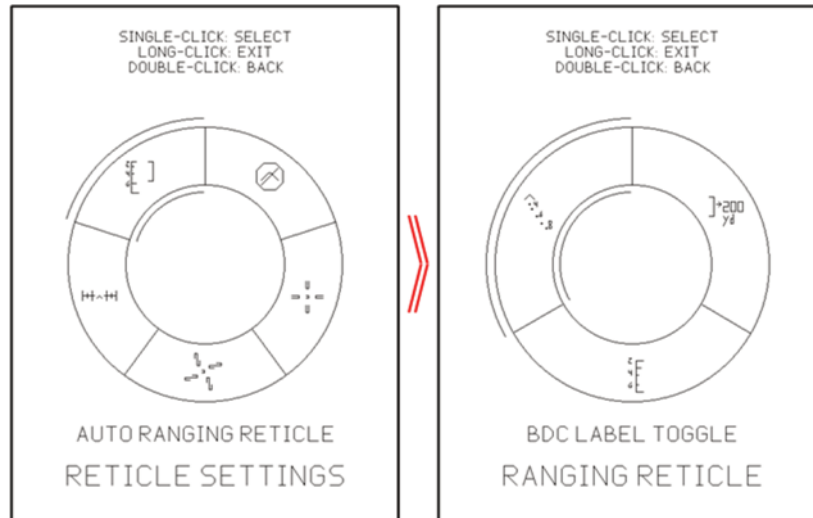
12. To toggle the adaptive ranging reticle visibility, rotate the knob to navigate to the *AUTO RANGING RETICLE* menu then click the X4-FCS™ button to select. Rotate the knob to navigate to the *ADAPTIVE TOGGLE* menu, then click the X4-FCS™ button to toggle. The adaptive ranging reticle depicts a 5'10" x 18" target. Adjusting the range setting on the X4-FCS™ to match the reticle size with a 5'10" x 18" target will give an estimated distance to target.



13. To toggle the static ranging reticle visibility, rotate the knob to navigate to the *AUTO RANGING RETICLE* menu then click the X4-FCS™ button to select. Rotate the knob to navigate to the *STATIC TOGGLE* menu, then click the X4-FCS™ button to toggle. The static ranging reticle indicated the distance given a 5'10" x 18" target. Measuring a 5'10" x 18" target will give an estimated distance in 100 distance units.

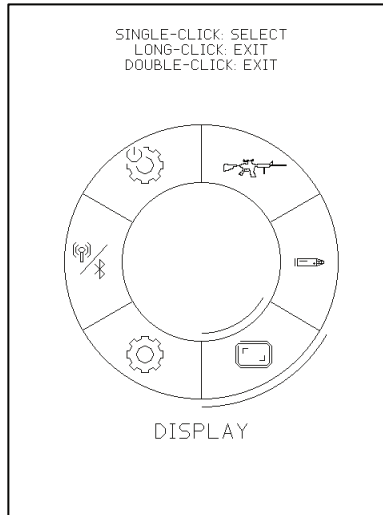


14. To toggle the Ballistic Drop Compensation reticle label visibility, rotate the knob to navigate to the *AUTO RANGING RETICLE* menu then click the X4-FCS™ button to select. Rotate the knob to navigate to the *BDC LABEL TOGGLE* menu, then click the X4-FCS™ button to toggle.

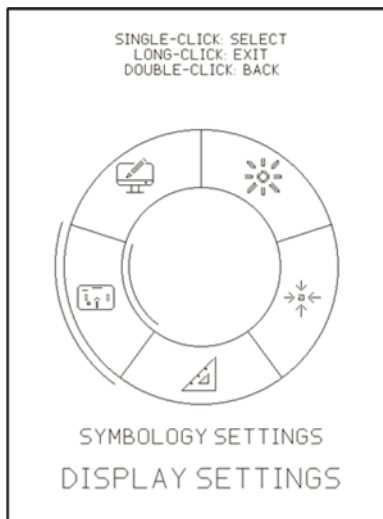


Symbology Ballistics Display Setting

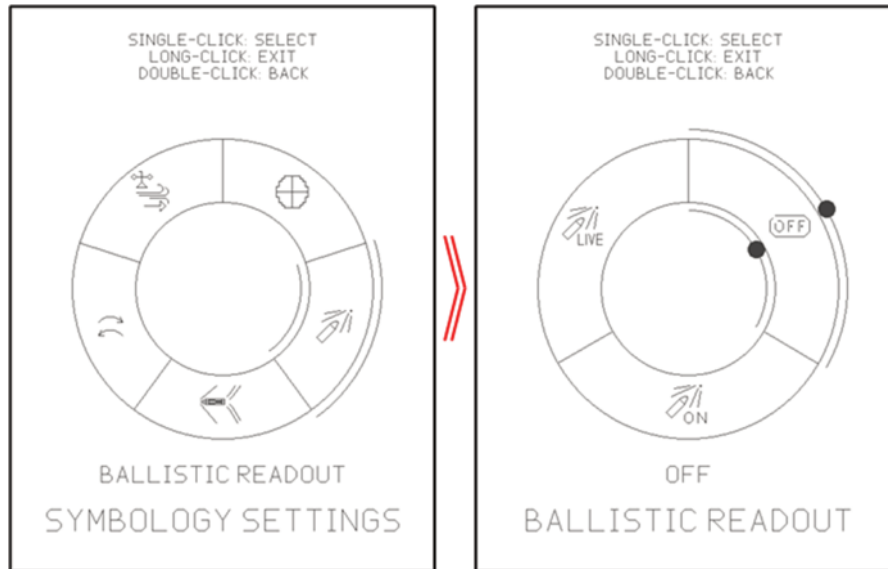
1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the DISPLAY menu, then click the X4-FCS™ button to select.



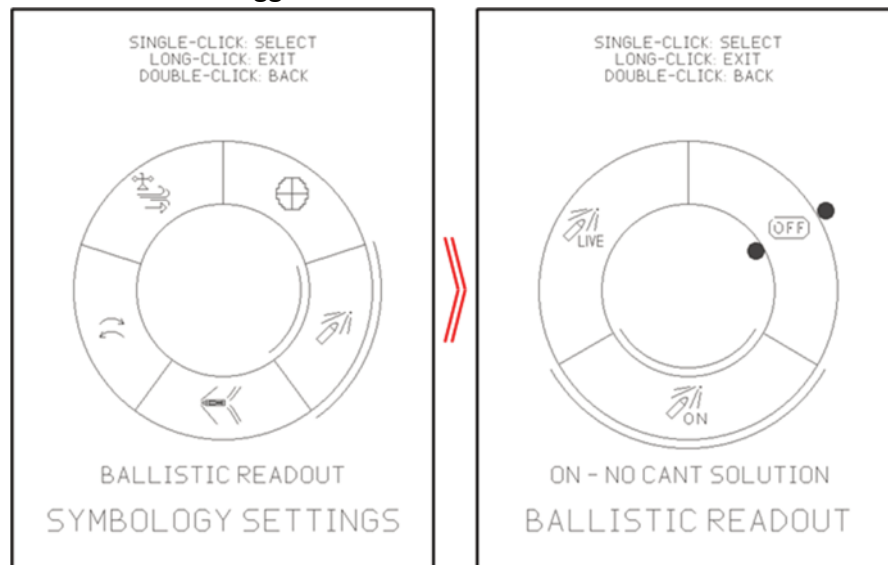
3. Rotate the knob to navigate to the *SYMBOLOLOGY SETTING* menu, then click the X4-FCS™ button to select.



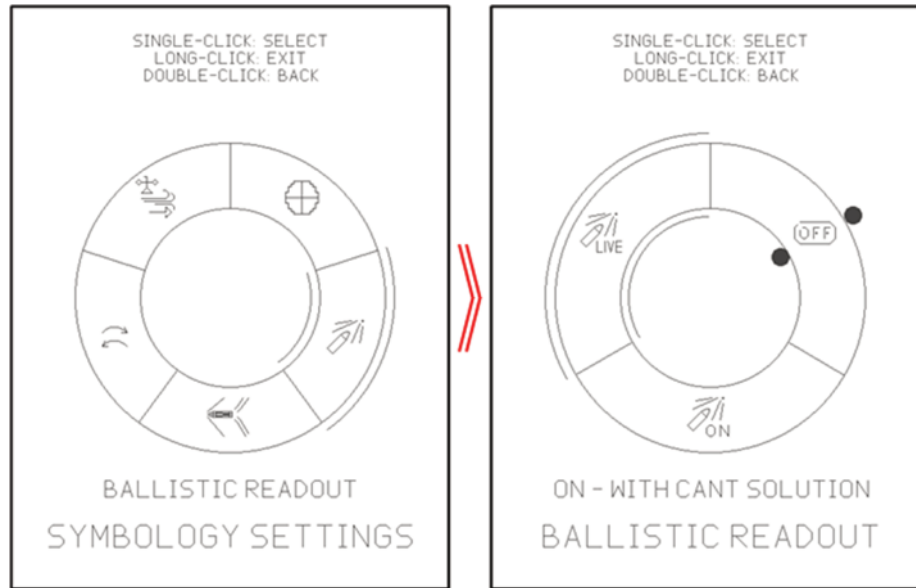
4. To turn OFF the ballistics readout symbology, rotate the knob to navigate to the *BALLISTIC READOUT* menu then click the X4-FCS™ button to select. Rotate the knob to navigate to the OFF menu, then click the X4-FCS™ button to toggle.



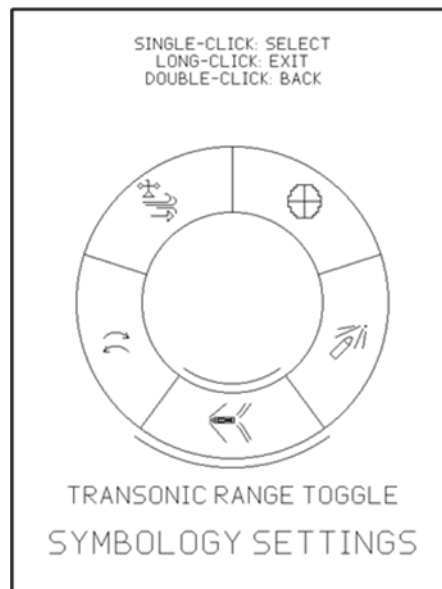
5. To turn ON the ballistics readout symbology without using the cant solution, rotate the knob to navigate to the *BALLISTIC READOUT* menu then click the X4-FCS™ button to select. Rotate the knob to navigate to the ON – *NO CANT SOLUTION* menu, then click the X4-FCS™ button to toggle.



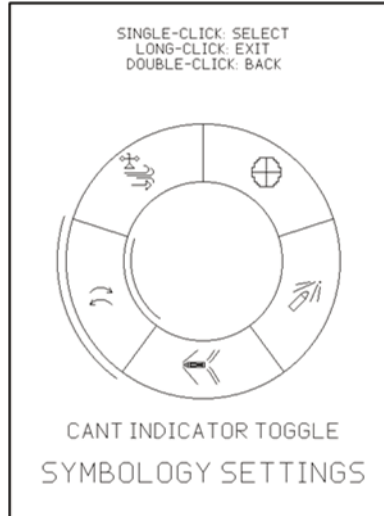
6. To turn ON the ballistics readout symbology with cant solution, rotate the knob to navigate to the *BALLISTIC READOUT* menu then click the X4-FCS™ button to select. Rotate the knob to navigate to the *ON – WITH CANT SOLUTION* menu, then click the X4-FCS™ button to toggle.



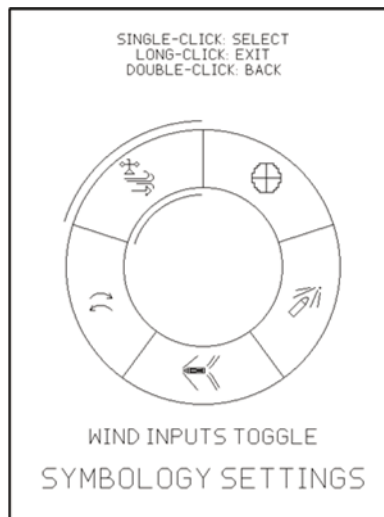
7. To toggle the transonic range symbology visibility, rotate the knob to navigate to the *TRANSONIC RANGE TOGGLE* menu then click the X4-FCS™ button to toggle.



8. To toggle the cant symbology visibility, rotate the knob to navigate to the *CANT INDICATOR TOGGLE* menu then click the X4-FCS™ button to toggle.



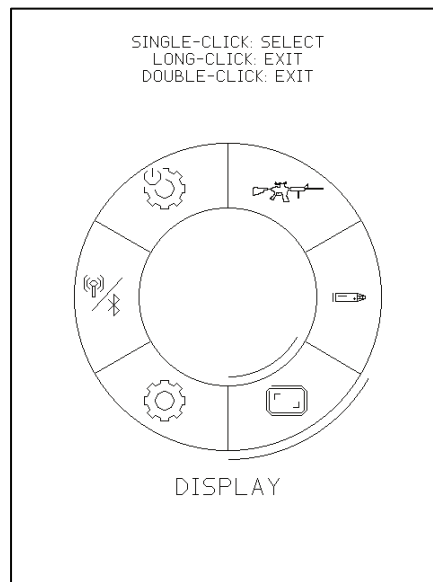
9. To toggle the wind input symbology visibility, rotate the knob to navigate to the *WIND INPUT TOGGLE* menu then click the X4-FCS™ button to toggle.



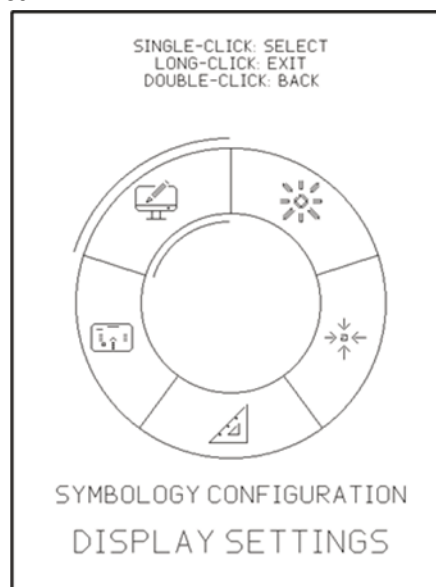
Symbology Presentation Setting

The X4-FCS has the capability of adjusting the location and size of the symbology on the display.

1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the *DISPLAY* menu, then click the X4-FCS™ button to select.

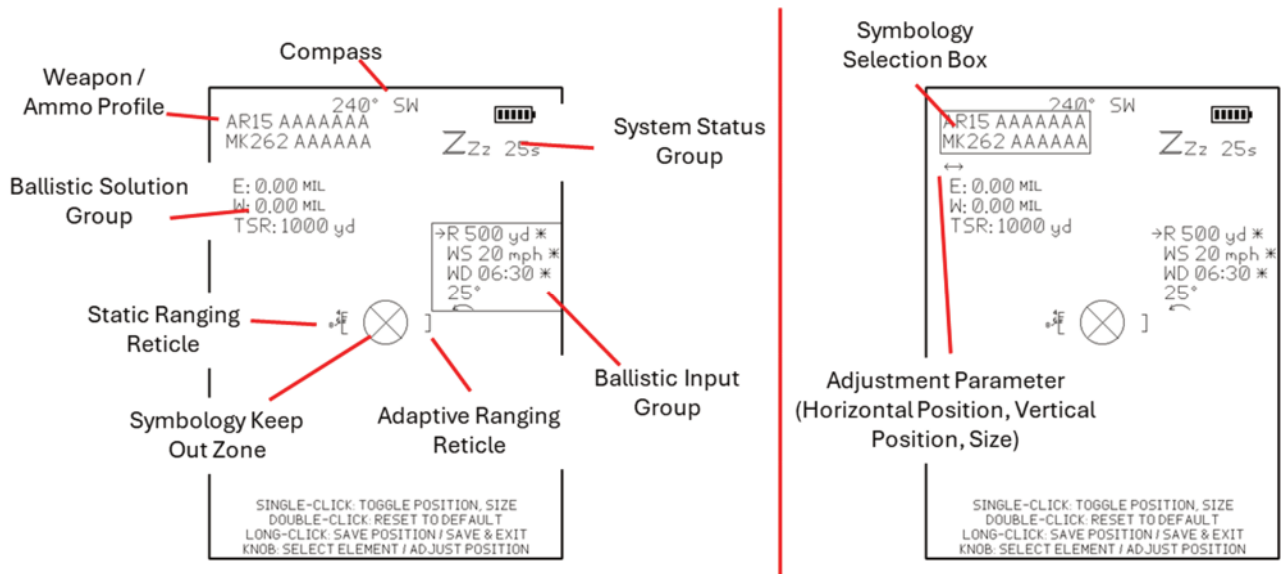


3. Rotate the knob to navigate to the *SYMBOLGY CONFIGURATION* menu, then click the X4-FCS™ button to select.



- To adjust the symbology location, use the knob to navigate to the symbology group to be adjusted and, then click the X4-FCS™ button to select. Click the X4-FCS™ button to change the adjustment parameter and use the knob to adjust the parameter. Click and hold (for 1 second) the X4-FCS™ button to save the symbology adjustment.

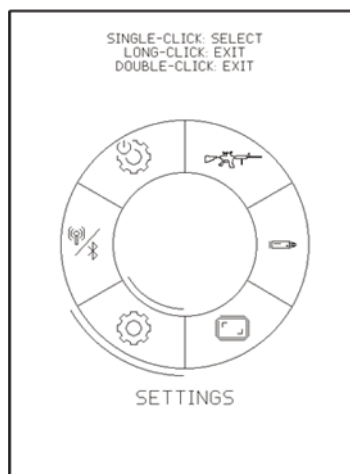
Note: No display symbology will be visible in the Symbology Keep Out Zone.



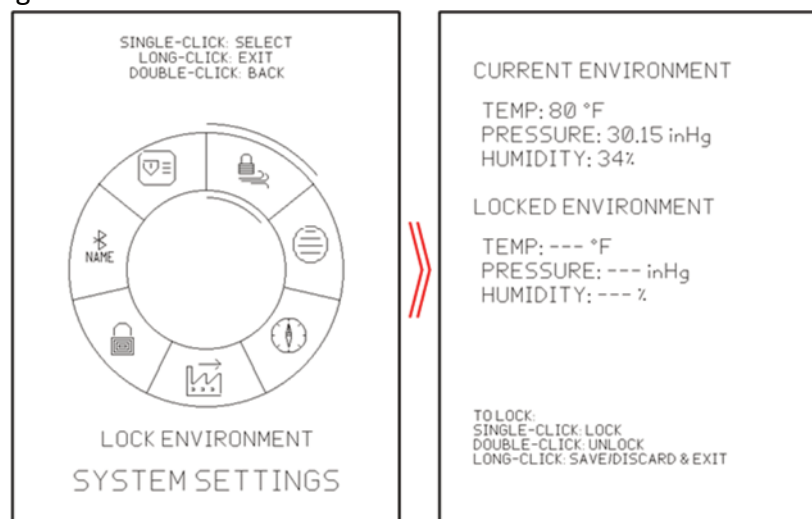
System Settings

The system settings menu allows for adjustment of environmental readings, latitude, and declination settings.

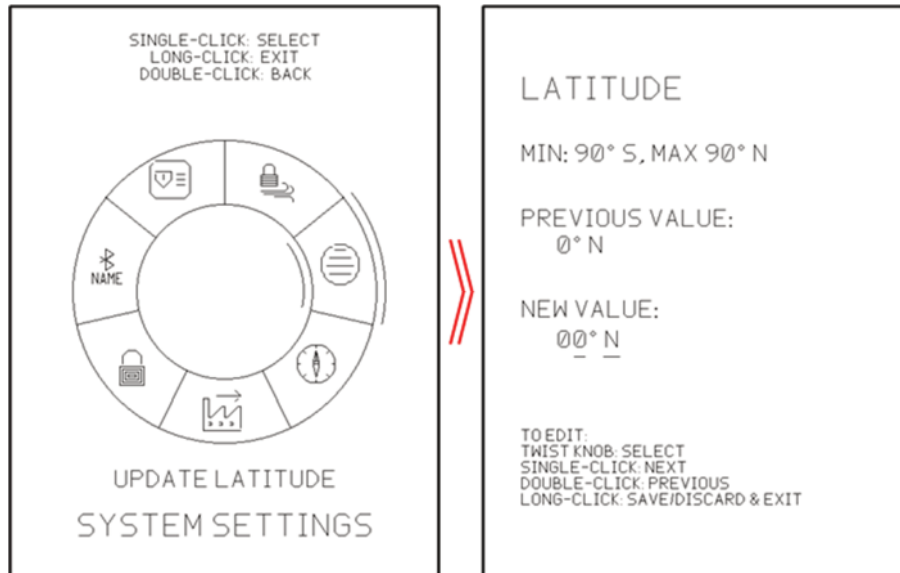
1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the *SETTINGS* menu, then click the X4-FCS™ button to select.



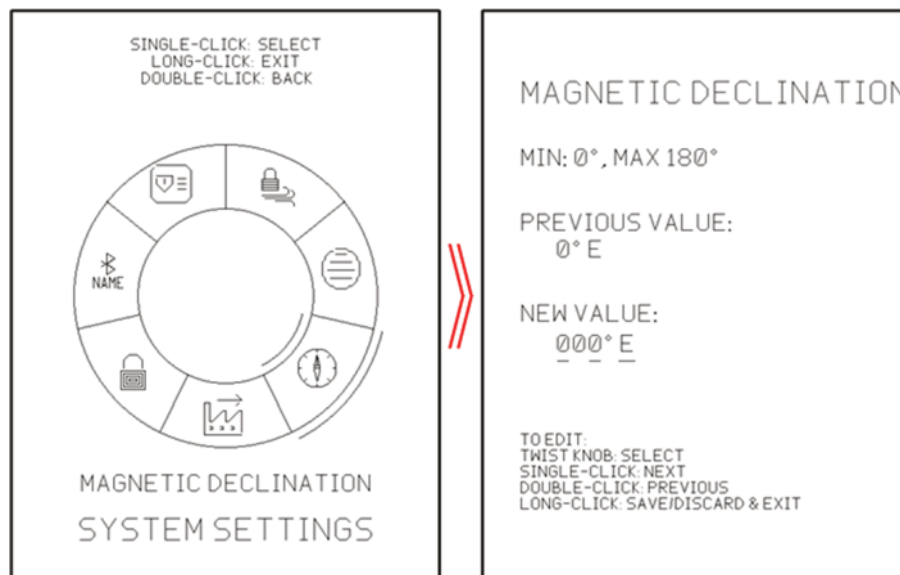
3. To lock/unlock the environmental reading, rotate the knob to navigate to the *LOCK ENVIRONMENT* menu then click the X4-FCS™ button to select. Click the X4-FCS™ button to lock the current environmental settings. Double-click the X4-FCS™ button to unlock the environmental settings. Click and hold (for 1 second) the X4-FCS™ button to save the settings. Click the X4-FCS™ button to confirm.



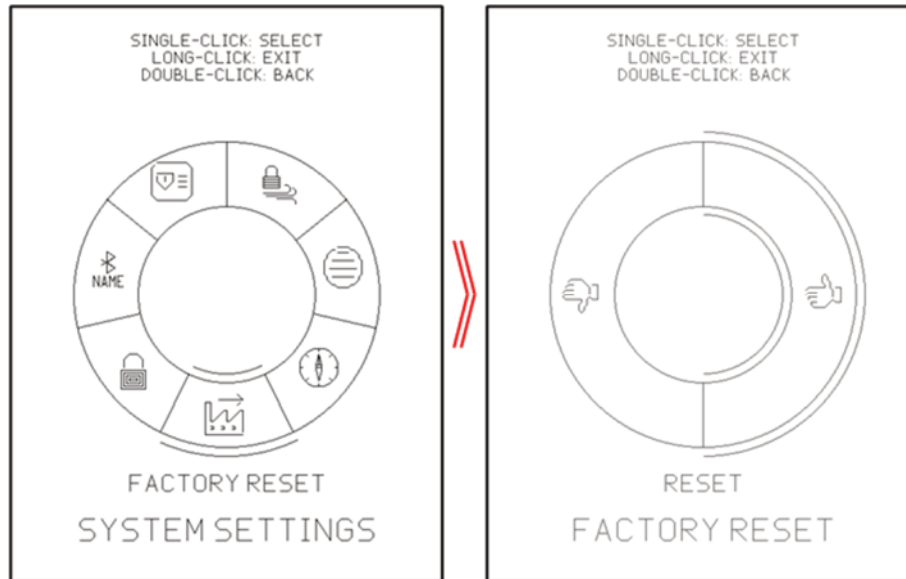
4. To update the latitude setting to be used in the ballistics calculation, rotate the knob to navigate to the *UPDATE LATITUDE* menu then click the X4-FCS™ button to select. Use the X4-FCS™ button and knob to adjust the latitude setting. Click and hold (for 1 second) the X4-FCS™ button to save current setting. Click the X4-FCS™ button to confirm.



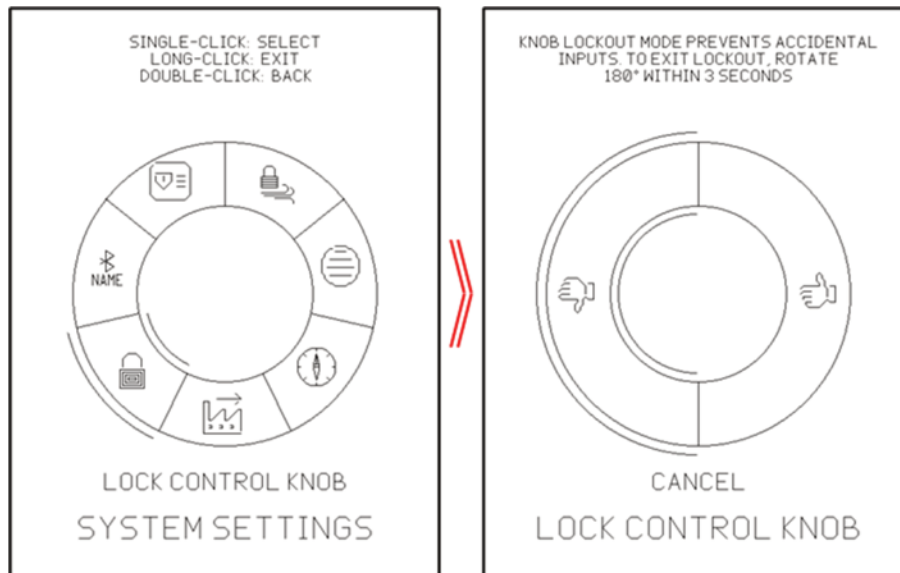
5. To update the magnetic declination setting to be used in the ballistics calculation, rotate the knob to navigate to the *MAGNETIC DECLINATION* menu then click the X4-FCS™ button to select. Use the X4-FCS™ button and knob to adjust the magnetic declination setting. Click and hold (for 1 second) the X4-FCS™ button to save current setting. Click the X4-FCS™ button to confirm.



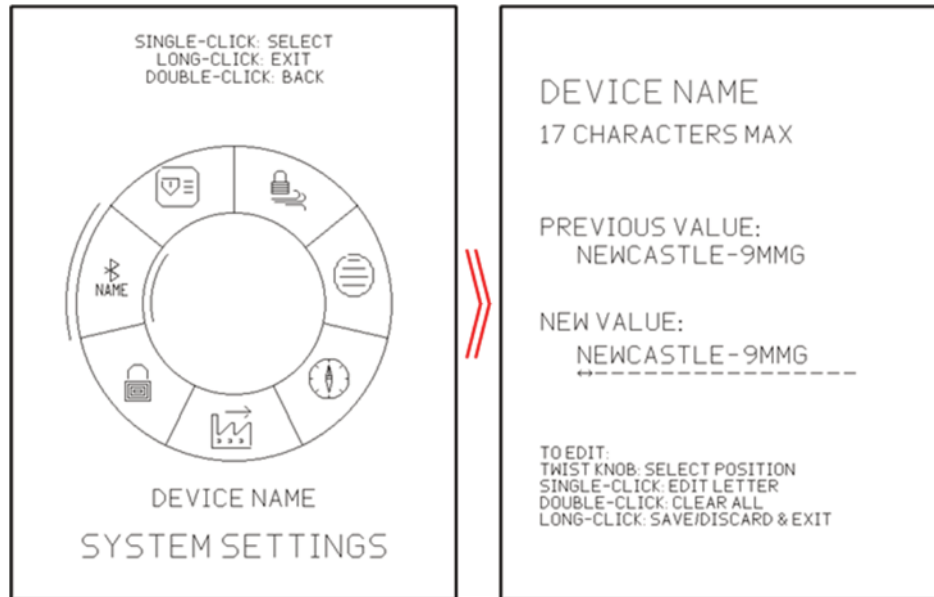
6. To reset the X4-FCS™, rotate the knob to navigate to the *FACTORY RESET* menu then click the X4-FCS™ button to select. Rotate the knob to navigate to the *RESET* menu, then click the X4-FCS™ button to reset the system. **WARNING:** A Factory reset will clear all *WEAPON* and *AMMO* profiles.



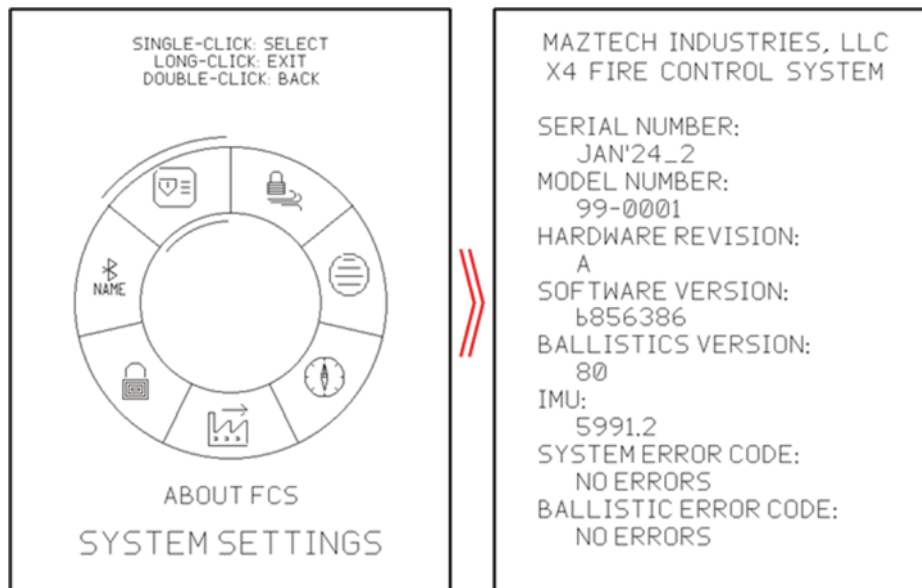
7. To lock the control knob to prevent accidental activation, rotate the knob to navigate to the *LOCK CONTROL KNOB* menu then click the X4-FCS™ button to select. Rotate the knob to navigate to the *LOCK* menu, then click the X4-FCS™ button to lock the X4-FCS™ button and knob. To unlock, rotate the knob 180° within 3 seconds.



8. To change the device name, rotate the knob to navigate to the *DEVICE NAME* menu then click the X4-FCS™ button to select. Use the X4-FCS™ button and knob to edit the device name. Click and hold (for 1 second) the X4-FCS™ button to save the device name. Click the X4-FCS™ button to confirm.



9. To view the system information, rotate the knob to navigate to the *ABOUT FCS* menu then click the X4-FCS™ button to select. Click the X4-FCS™ button to get out of the *ABOUT FCS* screen.



Wireless Settings

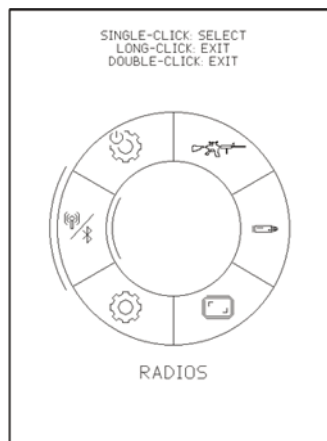
The X4-FCS™ has the capability of communicating to other devices through Bluetooth® Wireless Technology, UWB (Ultra Wide Band) and NFC (Near Field Communication).

Ultra-Wideband Radio and Near-Field Communication

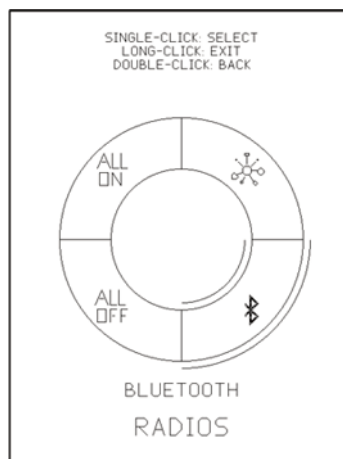
Both are disabled by default and will be coming in a future firmware update.

Bluetooth Radio

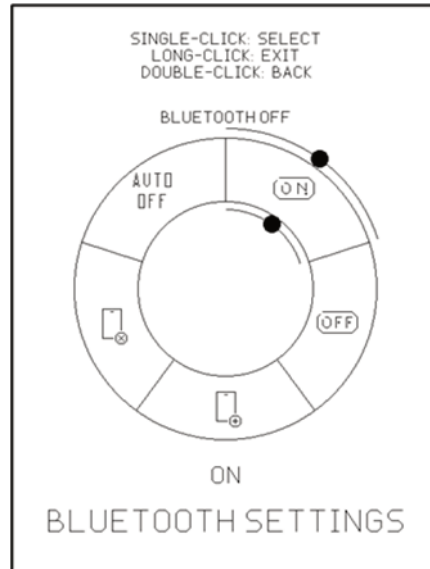
1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the *RADIOS* menu, then click the X4-FCS™ button to select.



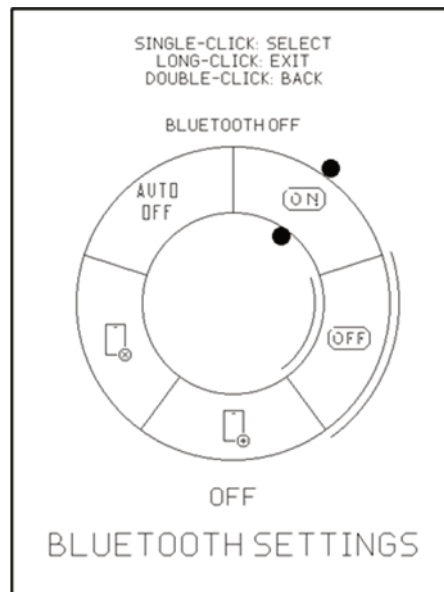
3. Rotate the knob to navigate to the *BLUETOOTH* menu, then click the X4-FCS™ button to select.



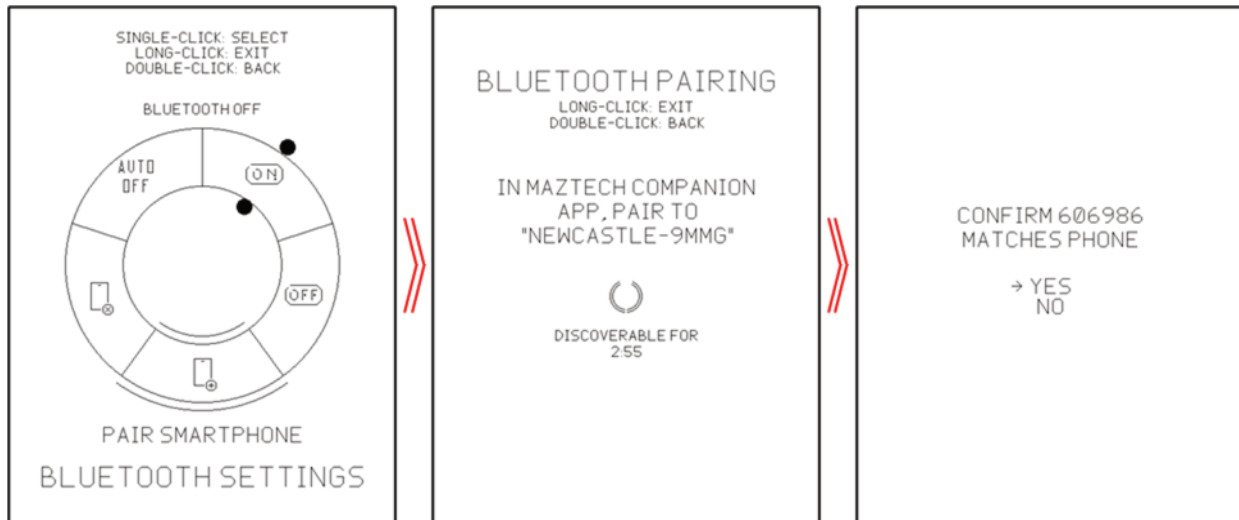
4. To turn ON the Bluetooth radio, rotate the knob to navigate to the *ON* menu then click the X4-FCS™ button to select.



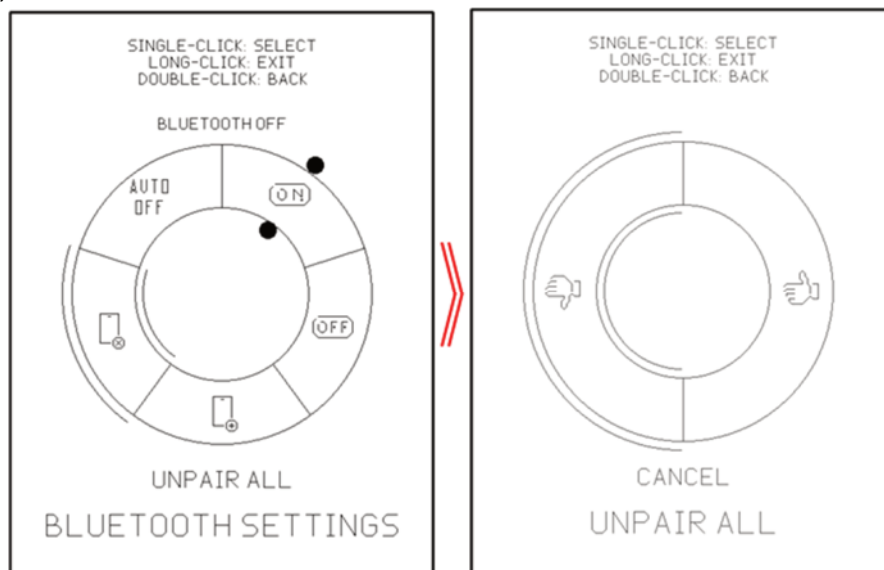
5. To turn OFF the Bluetooth radio, rotate the knob to navigate to the *OFF* menu then click the X4-FCS™ button to select.



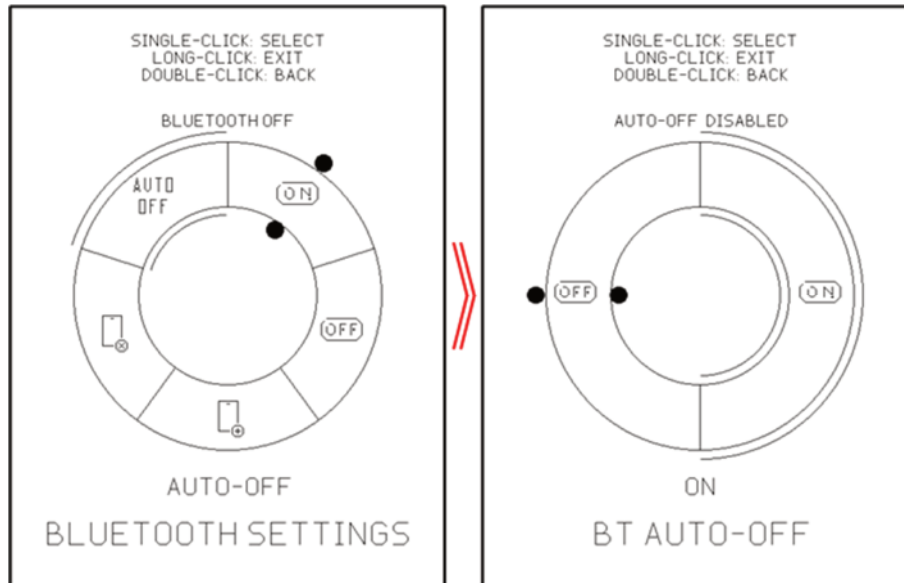
6. To pair a device to the X4-FCS™, rotate the knob to navigate to the *PAIR SMARTPHONE* menu then click the X4-FCS™ button. The X4-FCS™ will be discoverable to 3 minutes. Connect to the device using the Maztech Companion APP. See Connecting X4-FCS™ to Maztech Companion App section. When the device is connected to the X4-FCS™, click the X4-FCS™ button to confirm connection.



7. To unpair all devices on the X4-FCS™, rotate the knob to navigate to the *UNPAIR ALL* menu, then click the X4-FCS™ button. Click the X4-FCS™ button to confirm.

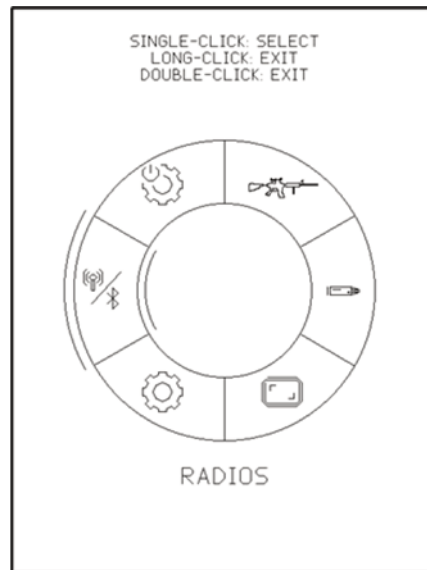


8. To enable/disable the Bluetooth auto off, rotate the knob to navigate to the *AUTO-OFF* menu then click the X4-FCS™ button. Rotate the knob to navigate to the desired setting, ON or OFF and click the X4-FCS™ button to select.

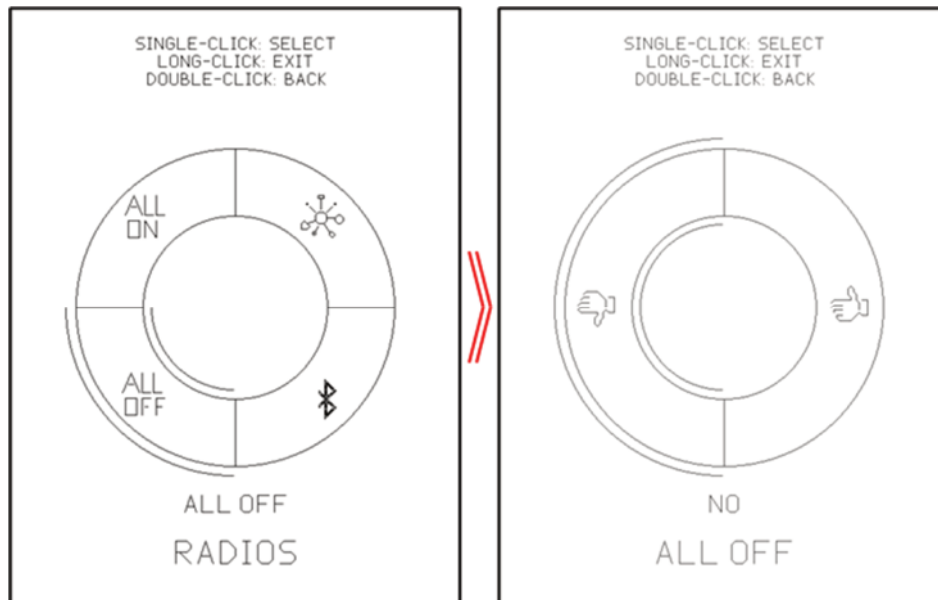


Radio Enable / Disable

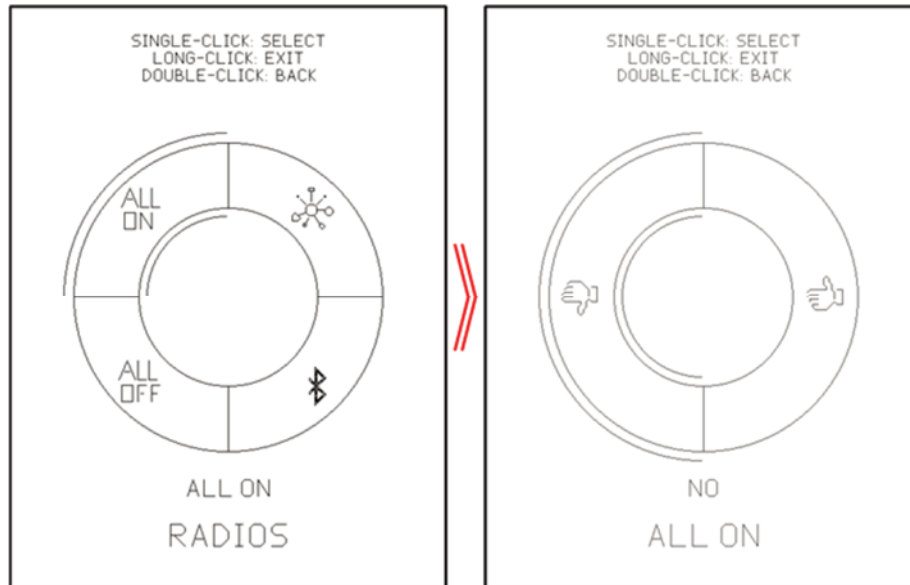
1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the *RADIOS* menu, then click the X4-FCS™ button to select.



3. To turn all radios OFF, rotate the knob to navigate to the *ALL OFF* menu then click the X4-FCS™ button to select. Rotate the knob to navigate to the *YES* menu, then click the X4-FCS™ button to turn all radios OFF.

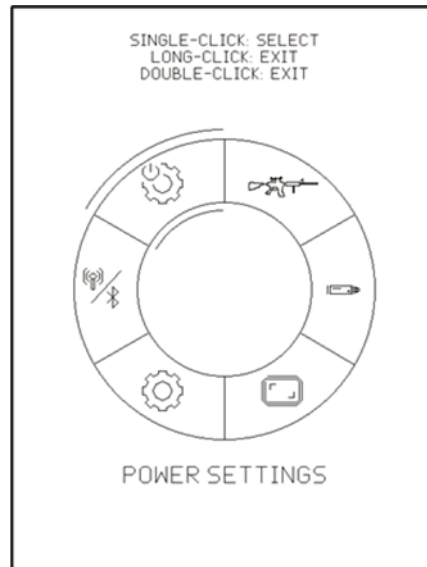


4. To turn all radios ON, rotate the knob to navigate to the *ALL ON* menu then click the X4-FCS™ button to select. Rotate the knob to navigate to the *YES* menu, then click the X4-FCS™ button to turn all radios ON

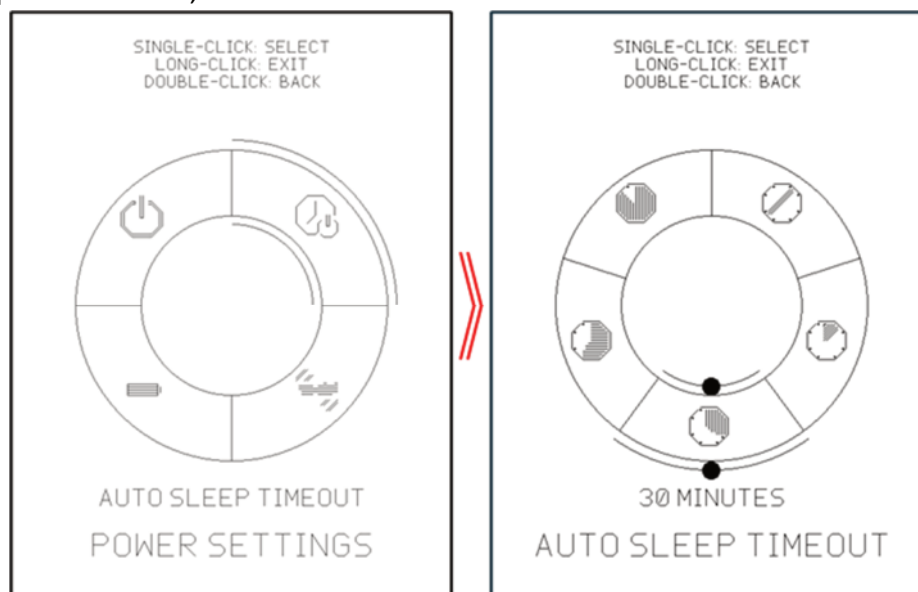


Power Settings

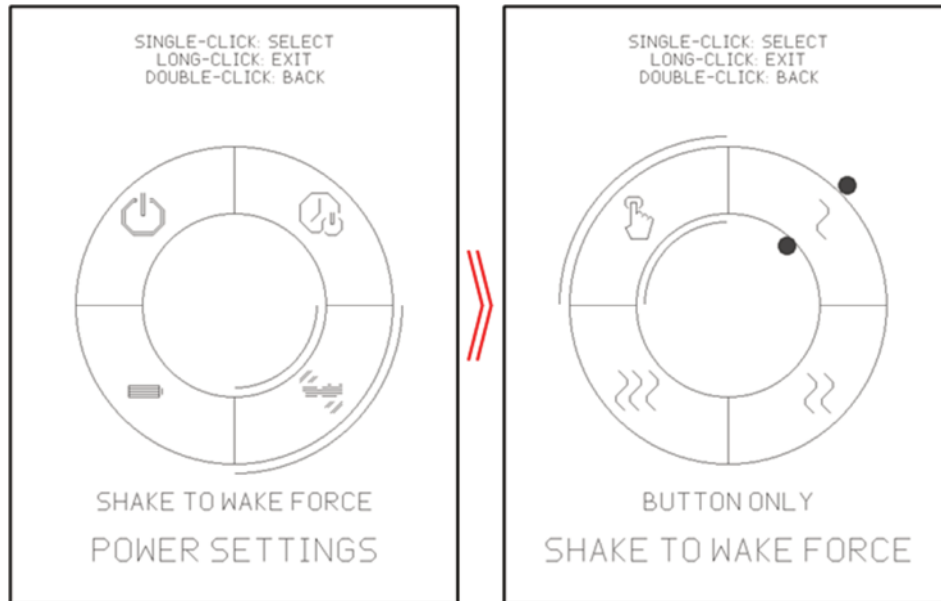
1. Click and hold (for 1 second) the X4-FCS™ button. Look through your LPVO to see the X4-FCS™ main menu.
2. Rotate the knob to navigate to the *POWER SETTINGS* menu, then click the X4-FCS™ button to select.



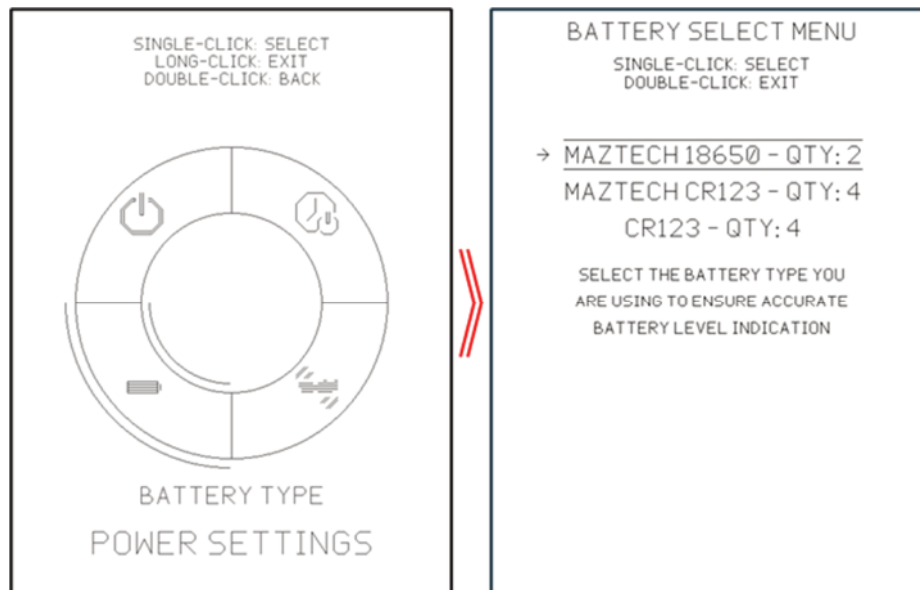
3. To set the auto sleep timeout, rotate the knob to navigate to the *AUTO SLEEP TIMEOUT* menu, then click the X4-FCS™ button to select. Rotate the knob to the desired auto sleep timeout time, then click the X4-FCS™ button to select.



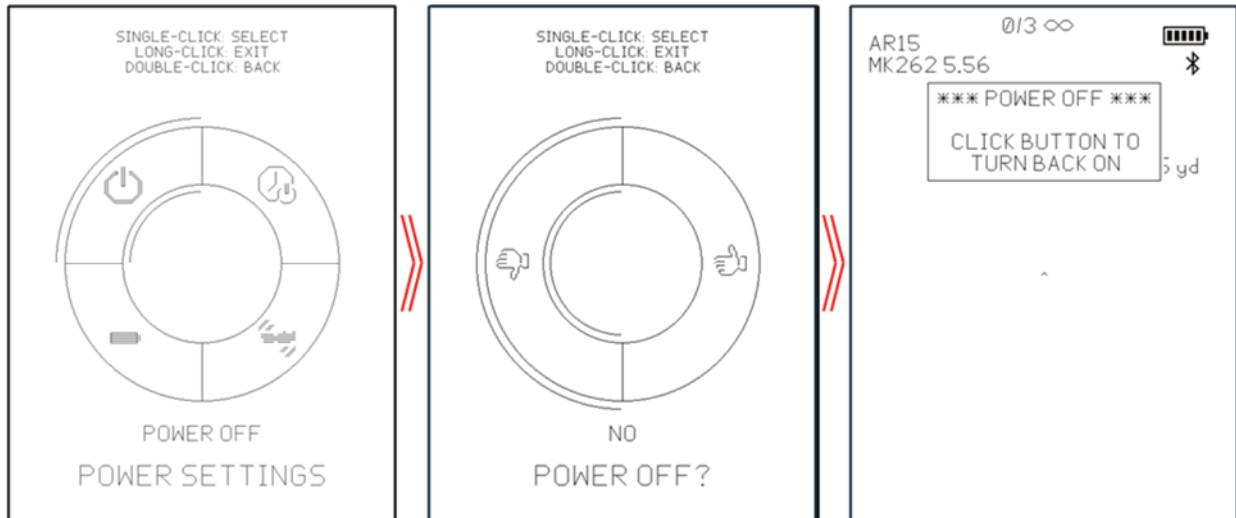
4. To set the shake to wake force, rotate the knob to navigate to the *SHAKE TO WAKE FORCE* menu then click the X4-FCS™ button to select. Rotate the knob to the desired shake force, then click the X4-FCS™ button to select. The *BUTTON ONLY* selection will disable the shake to wake, but will wake on a button press.



5. To set the battery type, rotate the knob to navigate to the *BATTERY TYPE* menu then click the X4-FCS™ button to select. Rotate the knob to the installed battery type, then click the X4-FCS™ button to select.



6. To turn OFF the X4-FCS™, rotate the knob to navigate to the *POWER OFF* menu then click the X4-FCS™ button to select. Rotate the knob to *YES*, then click the X4-FCS™ button to select. To turn the X4-FCS™ back ON, click the button after shutdown.





MAINTENANCE AND CARE

- Always follow standard firearm safety handling practices.
- Refrain from applying any bake-on finishes to the X4-FCS™, as this may damage the lenses, sensors, or electronics.
- The X4-FCS™ does not contain user-serviceable internal components.
- Scope rings should be free of dirt or foreign objects in the fastener holes.
- Clean your X4-FCS™ lenses with a microfiber cloth (included) and refrain from using abrasive cleaners.
- Operate between -40°F and +140°F
(-40°C and +60°C).
- Store between -51°F and 160°F
(-46°C and +71°C).

TROUBLESHOOTING

Problem: I cannot see the display.

Solution: The brightness is set too low. To resolve:

- a) Cover the front lens of the X4-FCS™
- b) Navigate to the Display Brightness menu and turn UP the brightness setting.

Problem: The X4-FCS™ is resetting during weapon fire.

Solution: Tighten battery caps.

- If this does not solve the problem: The interior of each battery cap may not be properly adjusted to the length of your batteries. See the online user manual for how to adjust the interior of each battery cap to the length of your batteries.

For further troubleshooting tips, visit www.MaztechIndustries.com. You can also get there by scanning this QR code with your smartphone or tablet:





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The X4-FCS™ does not contain user-serviceable internal components. Any modifications or repair attempts on the X4-FCS™ beyond those explicitly outlined in this manual or the online manual may nullify the warranty.

BATTERY SAFETY

Batteries must be handled with care to ensure safe and reliable operation. To prevent potential hazards and maximize battery performance, please observe the following guidelines:

- Use only batteries specified in this manual. Incorrect battery types or sizes can lead to malfunction or damage.
- Store batteries in a cool, dry place, away from direct sunlight and extreme temperatures. Do not store batteries loose in pockets or bags where they might come into contact with metal objects.
- Follow the instructions in this manual for proper battery installation. Ensure that batteries are inserted with the correct polarity (+ / -) as indicated by the device markings.
- Dispose of batteries in accordance with local regulations. Do not dispose of batteries in fire as they may explode or leak hazardous materials.
- If a battery appears damaged, deformed, or leaks, do not use it. Safely remove the battery and replace it with a new one.

Keep batteries out of reach of children and pets. Swallowing or mishandling batteries can result in serious injury.



FCC COMPLIANCE NOTICES

The X4-FCS™ complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. **Changes or modifications to the X4-FCS™ not expressly outlined in this manual or in the online manual could void the user's authority to operate the equipment.** Operating the Ultra-wideband (UWB) radio onboard an aircraft, ship or satellite is prohibited.

The X4-FCS™ has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: (a) Reorient or relocate the receiving antenna, (b) increase the separation between the equipment and receiver, (c) connect the equipment into an outlet on a circuit different from that to which the receiver is connected, (d) consult the dealer or an experienced radio/TV technician for help.

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EXPORT CONTROL NOTICE

International Traffic in Arms Regulations (ITAR) Controlled

The X4-FCS™ is controlled for export by the International Traffic in Arms Regulations (ITAR). These controls take the form of export regulations and license requirements. As part of the express consideration provided for receipt of Maztech's goods, technical data and/or services, you, our customer, acknowledge that the export, re-export or other transfer, directly or indirectly, of the goods, technical data and/or services provided by Maztech in violation of U.S. law is prohibited. Customers acquiring ITAR goods, technical data, and/or services from Maztech shall be responsible for obtaining any necessary U.S. or other government authorization required to ensure compliance with applicable export laws.