



RDX XM203 B.O.S.S. Unit Firmware Manual

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Introduction

Welcome to the RDX XM203 Unit Firmware Usage Manual. This guide will provide information on the firmware features and how to access or change them.

Safety Information

Before using the RDX XM203 unit, please ensure you adhere to the following safety guidelines:

- **Safe Environment:** Ensure you are in a secure environment free from other people and animals to prevent accidental injury.
- **Flammable Sources:** Keep the unit away from any flammable materials or sources to avoid the risk of fire or explosion.
- **Gun Safety:** If you are using a gun to activate the XM203, make sure the chamber is cleared and the gun is handled safely and responsibly.

Latest Firmware

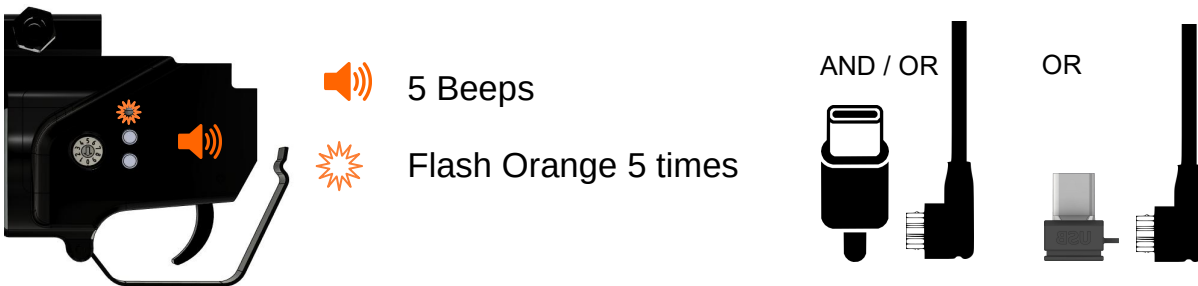
Revision: XM203_REV2.25.uf2
Released: 2024.JUL.26
Link: [Firmware Download Link](#)
XComms: [RDX XComms Link Download](#)

Powering Up

The XM203 B.O.S.S. Unit requires power to configure settings using one of the following methods:

1. **USB-C Connection:** Connect a USB-C cable from the unit to a PC. This will power up the unit and enable data communication when connected to the RDX XComms Link Software.
 - USB only does not allow you to live fire the XM203
2. **B.O.S.S. Power Cable:** Insert the B.O.S.S. power cable into the unit.
 - **USB-Dongle Orientation:** If using only the B.O.S.S. power cable, ensure that the USB-Dongle is inserted correctly. Incorrect insertion will prevent the unit from powering up

When power is added:



USB-C Only

Power connected through the USB only and "Not" connected to the RDX XComms Link Software



Note: No features are available in this mode. You will need to add the B.O.S.S. Power or connect the RDX XComms Link software to access the unit settings.

Connecting XComms Link

Successful connection made between the PC and the XM203 B.O.S.S. unit via the RDX XComms Link Software.

This is either USB only or with the B.O.S.S. Power cable fitted.

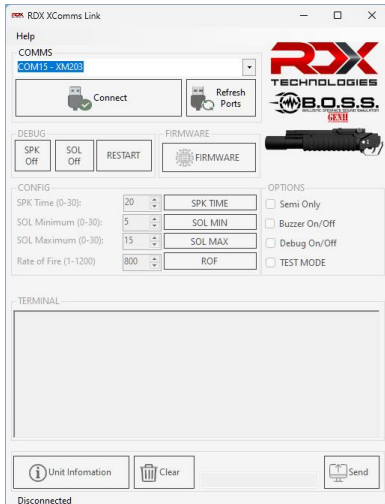


In this state, changes can only be made using the XComms Link software.

RDX XComms Link

Download Link: [XComms Link Download](#)

Install the software and run.



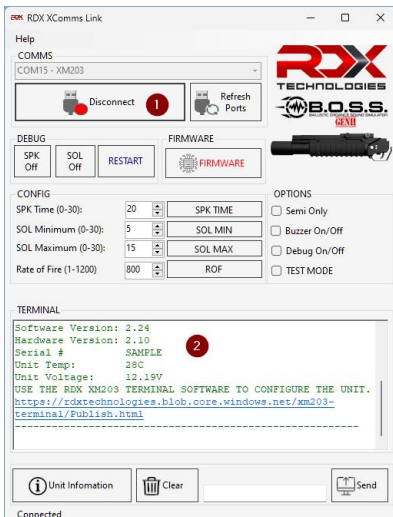
If a USB-C connection is made to the PC, the COMM Port should be shown as COM[X] – XM203. X can be any number.



A successful connection is made by pressing [1]“Connect”

If COM[X] – XM203 is not shown, you may need to press [2]“Refresh Ports” to locate any new USB device added.

Software will change to [1]Disconnect, [2]Print out the unit information to the Terminal Window.



[3] The unit will beep and the LED change to a solid Orange.



 1 Beeps

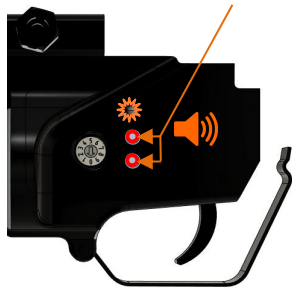
 Solid Orange

Test Mode

Activate Test Mode Via XM203

While pressing the DOWN key, tap the UP key. Release when you hear 1 x long beep and LED turns solid Orange. The unit is now in test mode. The Green LED should flash every 2 seconds indicating test mode is still active.

***Press & hold DOWN key and Tap UP Key. Release when you hear beep.



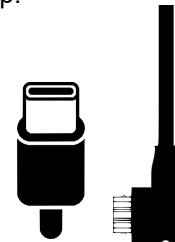
1 Beep 2 Seconds



Solid Orange



Flash Green every 2 Seconds

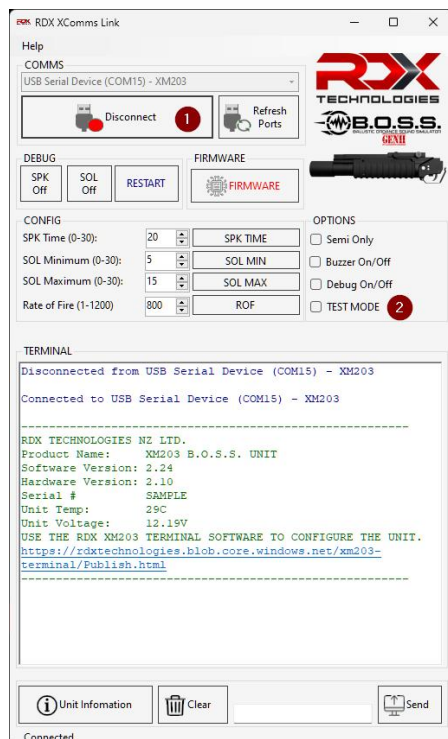


This will validate the unit is correctly receiving a trigger signal without live firing. If a signal is received, the LED will flash orange with a short beep each time a trigger signal is received.

If firing the gun in Semi, you should only get one activation. In Auto, you should see the LED blink orange as per the XM203 set fire rate or the rate of fire as per the gun (Which ever has the lowest rate of fire).

Example: Gun fires 2000RPM and XM203 set to 850RPM. On Auto, the LED and buzzer should blink and beep at 850RPM.

Test Mode Via RDX XComms Link

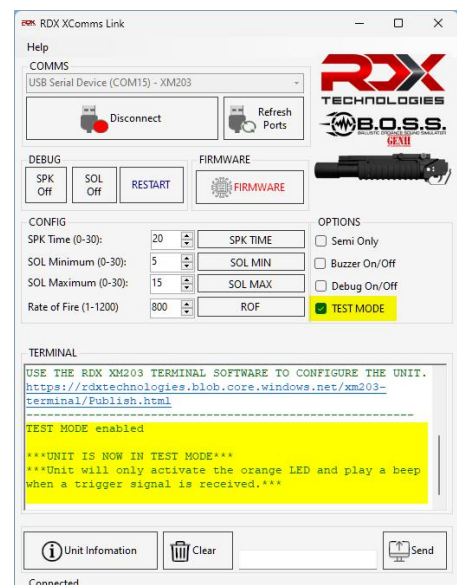


Using the RDX XComms Software, connect to the unit by selecting the correct Comm port and pressing [1].

Checking [2] "TEST MODE" will activate the connected unit into TEST MODE allowing you to test the unit without live firing.



The unit is now in test mode and will ONLY activate the LED and buzzer when a trigger signal is received. Un-checking "TEST MODE" will place the unit back into LIVE FIRE mode and fire the unit if a trigger signal is detected.

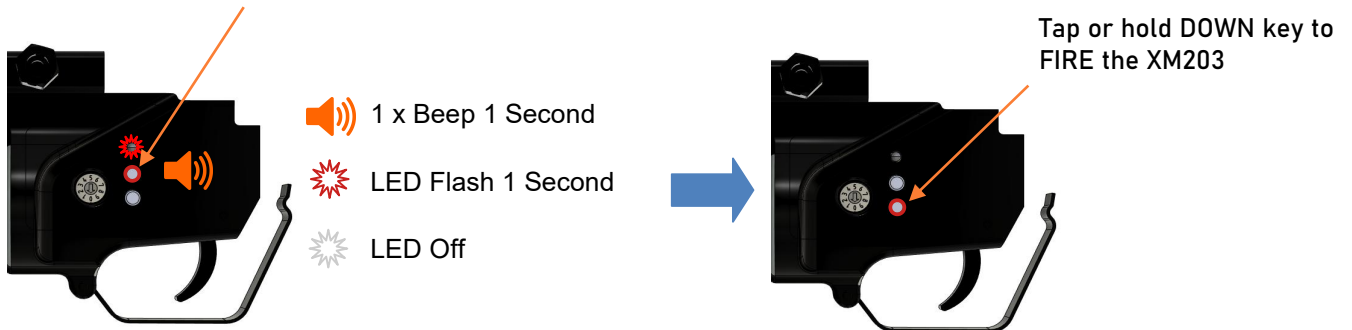


Deactivate Test Mode

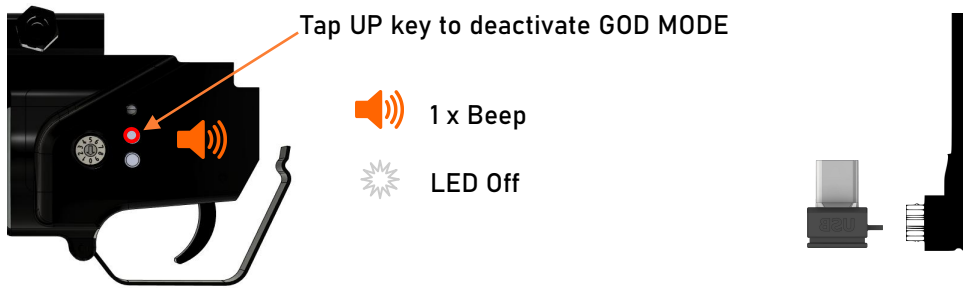
Repeat [***] action to return to normal or un-check "TEST MODE" to return to USB Mode.

God Mode Activation

God Mode allows the unit to be fired using the DOWN key instead of the gun trigger to activate the XM203. Press and hold the UP key until you hear the beeps and the LED flashes RED.

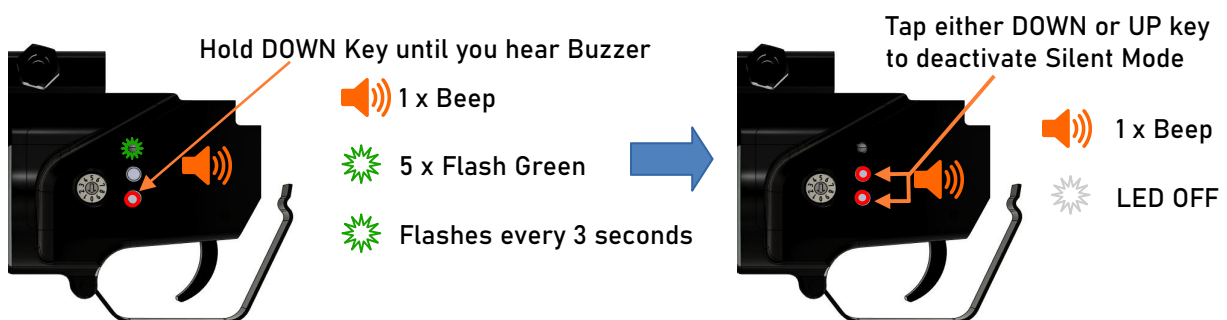


To deactivate "GOD MODE", tap the UP key.



Silent Mode

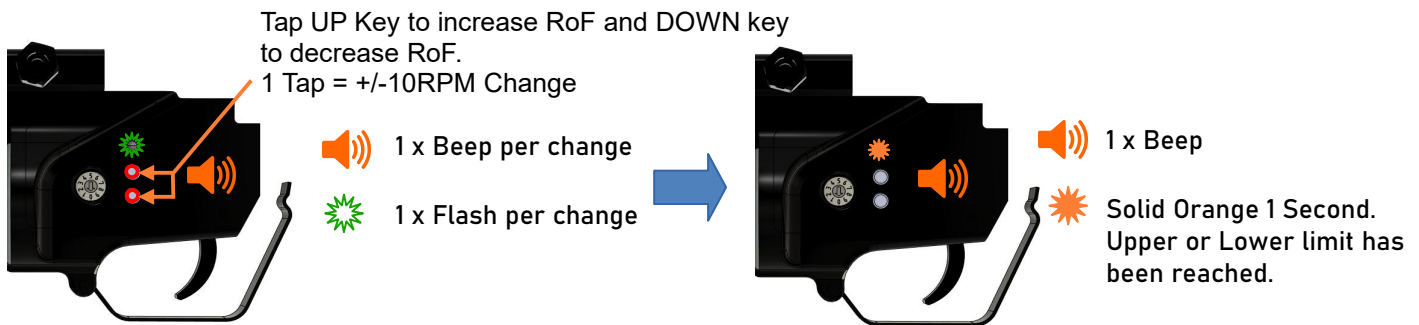
Silent mode allows you to quickly deactivate the XM203 without removing power. While in "Silent Mode", the XM203 will ignore any trigger signals making the unit silent.



Changing RoF (Rate of Fire)

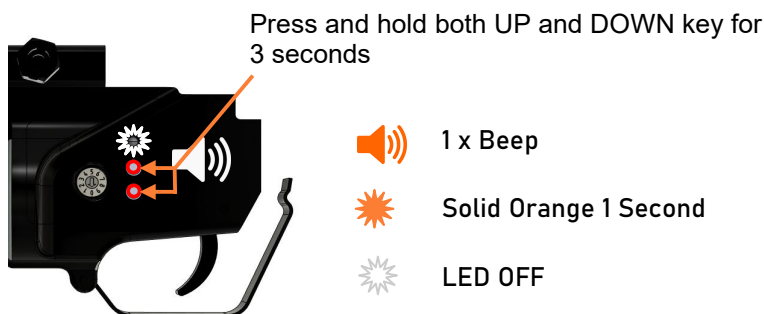
To change the Rate of Fire from 1RPM(Round per Minute) to 1200RPM, do the following.

Adjust RoF (Rate of Fire)



Reset RoF (Rate of Fire)

To reset the "Rate of Fire" to a known value or 850RPM.



The XM203 is now set to the default Rate of Fire of 850RPM

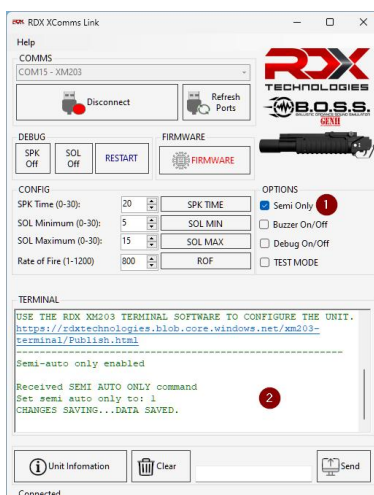
Semi-Only Mode

Used on systems where the trigger contact remains active until released in Semi-Only mode.

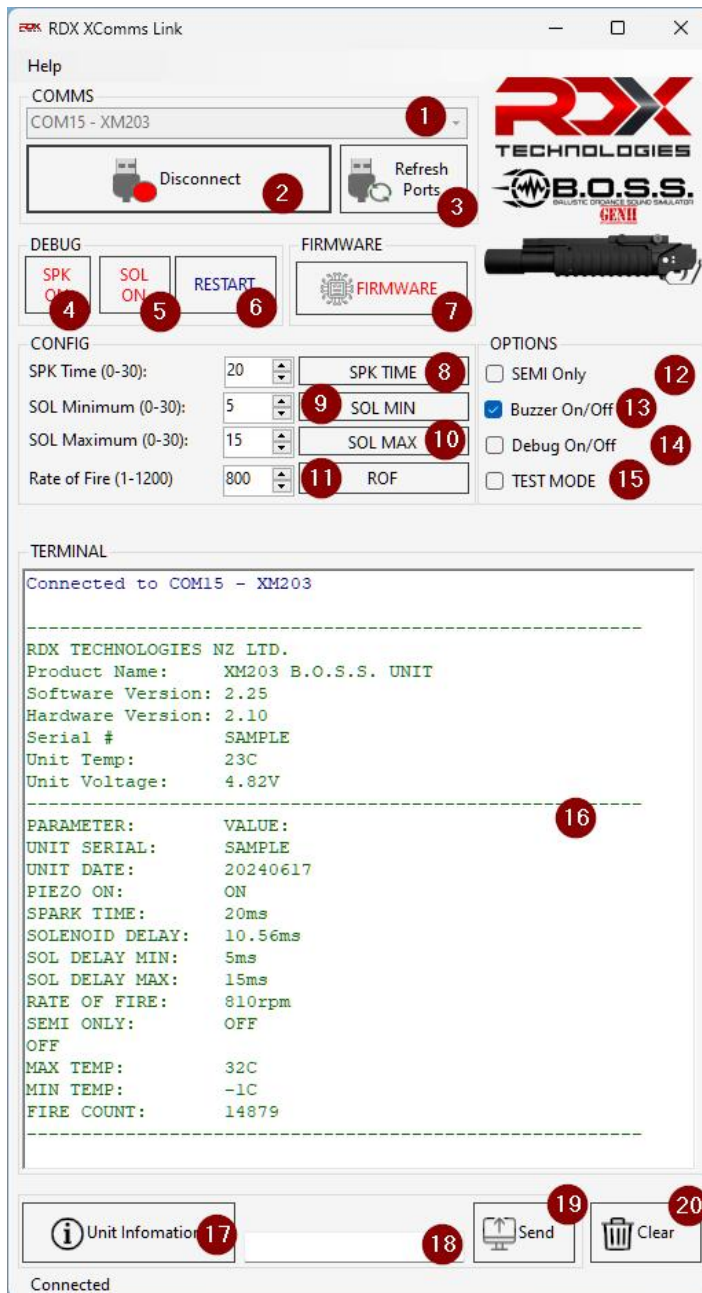
Note: Activating Semi-Only mode will not allow the unit to be fired in auto from the gun

Select Semi Only[1] to place XM203 into Semi-Only mode

Confirmation[2] from the XM203 indicate the unit is now is Semi Only mode and saved to memory.



Debug Options



1. Selected PC Communication Port.
2. Connect and disconnect from the select Comm Port[1]
3. Refresh available Comm Ports
4. Disable the Spark and allow the firing sleeve to be removed to test the Solenoid
5. Disable Solenoid and allow the firing sleeve to be removed to test the Spark
6. Restart the unit. This will reset any disabled debug options.
7. Place the connected unit into firmware update mode.
8. Change the Spark on time in milliseconds
9. Change the solenoid minimum on time in milliseconds
10. Change the Solenoid maximum on time in milliseconds. The unit dial value us between Min and Max.
11. Set the unit Rate of Fire in RPM (Rounds Per Minute)
12. Place the unit into Semi-Only mode. The unit will only fire once per trigger pull.
13. Turn the buzzer On/Off
14. Place the unit into debug mode.***WARNING this will allow the unit to fire without checking the firing sleeve is closed.
15. Place the unit into test mode. The unit will beep and flash orange each a trigger signal is received. This is used to test the connection to the guns trigger.
16. Input and output to the connected unit.

17. Request all the information from the unit.
18. Write commands to be sent to the unit.
19. Send the written command[18] to the connected unit.
20. Clear the text from the terminal screen[16]

Trouble Shooting

LED STATUS	BUZZER STATUS	ERROR/STATUS	Information
Flashing 2 Seconds 	— — — x 5	Power Up	Unit has successfully powered up.
Flashing  	_____ 1 Sec	Low Voltage	Unit requires >6.9VDC.
Flashing 	— — — —	High Voltage	Input voltage over 16VDC. Reduce the input voltage below 16VDC.
Solid 	----- 2 Sec	Firing Sleeve Error	Firing sleeve is not in the home position. Make sure the firing sleeve is all the way back. Error will turn off when firing sleeve is in the home position.
Solid 	_____ 1 Sec	USB Mode	If no B.O.S.S. power fitted or the unit is connected to a USB port, then the unit is in USB mode only.
Flashing  		Unit Cold	Allow the unit to warm up above -10°C.
Flashing  		Unit Hot	Allow the unit to cool down below 70°C.