

The purpose and benefit of SIMO is to train without fear while gaining competence and confidence with your personal firearm.

Your SIMO-enabled pistol, when a TMag is properly inserted, is unable to fire any ammunition. The SIMO system provides a safe, simple way to train realistically to develop good habits and build muscle memory through repetitive practice with the same pistol you use for sport shooting or protection.

# **Table of contents**

4	Know your SIMO System
6	Charging, storing, and caring for your TMag
6	Setting features on your TMag
8	Assisted training mode features
10	Activating training mode
11	Training with SIMO
12	Returning to live fire mode
12	Troubleshooting
14	Notes for Military, Law Enforcement, & Armorers
16	Frequently Asked Questions
17	Notes and Observations

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# List of parts:

- **A** On/Off switch
- USB charging port
- Menu button
- Display
- Slide sensor

- Trigger return/ Reload lever
- **G** Speaker
- Safety lights



# Charging, storing, and caring for your TMag

- · Charge the battery in the TMag to full charge (4 bars) before first use. Remove from charger after one hour.
- ·Turn on the power on the TMag and check the battery level on the main display to see if the TMag needs recharging before use or storage.
- · If the TMag gets dirty, wipe it clean with a soft, dry cloth. Do not wash or immerse the TMag in liquids. Manufactured TMags are intended to be water-resistant and impact resistant, but that is not the case with this demonstration model.
- The demonstration TMag is a training device and not designed for abuse (dropping on concrete floors, throwing, etc.).
- Store the TMag in your gun case or shooting bag where it will be easily accessible whenever you want to practice safely. Turn off power completely with the on/off switch before storing.

# **Setting features on your TMag**

#### How to use the menu

- To open the menu on the display, **HOLD** the menu button **FOR 2 SECONDS** and release. You will hear a beep.
- · To advance the menu selector to the next feature, press and quickly release the menu button.
- · To select a menu option, **HOLD** the menu button **FOR 2 SECONDS** and release it, and then you will be able to press the menu button quickly to toggle or advance to your desired value.

- ·To save your selected value and return to the main menu, **HOLD** the menu button **FOR 2 SECONDS** and release it.
- To exit the menu, select EXIT. HOLD the menu button FOR 2 SECONDS and release it.

# **Default Display**

- Round Count: Remaining "ammo" in the TMag. Decreases with each "shot" in SIMO training mode. Cap indicates magazine capacity.
- · Battery charge status: Status is shown in bars (4 is fully charged).
- · Note: The display is blank when the TMag is powered off or is inserted in the pistol.

# Round Cap

#### **Basic menu features**

- **Volume:** Select speaker volume from Off to High. The default is Medium. The speaker will play sounds for each shot, for certain simulated malfunctions, and for audio guidance in assisted training modes.
- Auto Reload: Select whether the TMag will automatically refill when empty & ejected or will require a manual action to reload. Select On or Off. The default is On. Manual reload is explained in the Training with SIMO section of this booklet.
- Magazine Capacity: Adjust TMag round count from 7 to 18 rounds to match your regular magazine capacity. Default capacity is 10 rounds. When shooting, the TMag tracks your shots fired.

# **Assisted training mode features**

- Coach Mode Level: "Select training mode level: 0 (Off), 1, 2, 3, or 4, where 4 provides the most instruction and guidance and 0 provides no spoken guidance. The default level is 1. Coaching prompts occur, if coach mode level is 1 or higher, at current setting after two unsuccessful tries to correct an error. Coaching prompts automatically escalate to the next level after two additional unsuccessful tries. When the user successfully clears the error, Coach mode automatically returns to the user-selected level. New shooters may prefer level 3 support to start, reducing the level of support as they gain proficiency with shooting and handling occasional simulated malfunctions.
- Error Rate: Select the frequency of simulated malfunctions. Toggle between Off, Low, Medium, and High error frequency. The default frequency is Off, with two exceptions that will occur regardless of your error frequency setting:
  - Out of ammo the TMag round count has reduced to 0 and you are still
    pulling the trigger. Audio feedback when pulling trigger: "Click." Eject
    the TMag and insert a reloaded TMag.
  - Slide open the slide is open and you are still pulling the trigger. Audio feedback when pulling trigger: silence. Rack the slide and let it close.
- Shot Timer Mode: Enter shot timer mode. Default is Off. Display will change to shot timer display (shown right). Shot timer is now active.
  - Start shot timer session Insert Tmag. Shot timer will beep within 2-6 seconds for you to begin shooting. As you shoot, it will record your split times and reduce remaining rounds.
  - End shot timer session Remove TMag from firearm, press the menu button and split times will show on display as shown. Press the menu button to move through each split. Shot 1 split is timed from beep to first shot, thereafter splits are timed between each shot. The average is from all, including first shot. Shots is the total number of shots per session. To run another set, simply reinsert TMag back into





the gun. It will store your previous set of splits but reset the display to current session.

- Exit shot timer mode - Press and HOLD the menu button for 2

Avg Split: 1.04 sec Total Rounds: 12 Session Rounds: 9 Total Mags: 1

SECONDS. Powering down the TMag also exits shot timer mode. Exiting shot timer mode before reviewing the split times will discard those split times entirely.

- Simulated Malfunctions: Controlled by the error frequency setting and include:
  - Misfire the primer is hit but does not set off the gun powder, leaving the bullet in the chamber. Audio feedback when pulling the trigger: "Click" for the first trigger pull only; after that, silence. Clear a misfire by fully cycling the slide to clear the chamber.
  - Stovepipe the bullet fires but the casing ejects improperly, causing it to be caught in the slide. Audio feedback when pulling the trigger: silence. Clear a stovepipe by racking the slide to eject the casing and load the next bullet.
  - Squib the primer fires but there is no gun powder, launching the bullet into the barrel but not out of it. Audio feedback when pulling the trigger: "Pop." Listen closely for this sound because if you pull the trigger again it could cause an explosion if you fire another round without clearing the barrel first. Clear an actual squib by taking your pistol to an armorer or similar professional to be cleared. Clear a simulated squib by removing your TMag, which simulates taking the gun out of action and taking it to a professional to be cleared.
- Laser: Set target laser On or Off. This feature requires additional hardware which is not installed in the current demonstration model.
- · Statistics: View logged SIMO shooting statistics. These include:
  - Avg Split Average of all split times from shot timer mode
  - Total Rounds rounds fired since last TMag reset
  - Total Mags each TMag that has been inserted since last TMag reset
  - Timed Shots total of all shots made in shot timer mode since last TMag reset

- Session Rounds rounds fired since TMag was most recently powered on
- Session Mags each TMag that has been inserted since TMag was most recently powered ON
- Sessions how many times you have turned on the TMag since last TMag reset
- Money Saved Estimated savings through simulated training versus ammunition costs and range visits
- Reset TMag: Choose between three options: Reset Statistics, Reset Settings, and Reset All. The display returns to showing the current rounds remaining and battery charge status. Press menu button to select an option. Press and HOLD menu button for 2 SECONDS to reset. Select EXIT to cancel out of RESET.
- Exit: The display returns to showing the current rounds remaining and battery charge status.

# **Activating training mode**

ALERT: Always follow basic gun safety protocols, even with SIMO safe mode active, to maintain correct habits.

- Always point your pistol in a safe direction. Only aim at something you intend to shoot to avoid injury in the case of accidental discharge. Know and control where the muzzle is pointing at all times.
- Always assume the gun is loaded. Clear the chamber then insert the TMag until it is firmly seated, as indicated by lighted blue LEDs on the base of the TMag. Only at this point does the SIMO system safely disrupt the normal firing mechanism of the pistol.
- Keep your finger off the trigger until you are ready to shoot.
- 4. Always be sure of your target and what's beyond it.

## **Training with SIMO**

#### User Feedback Cues

The primary method of user feedback is a set of sounds. Secondary feedback is available on the display and menu's user Statistics. If implemented in model, a laser can provide additional feedback on shot location. Sounds include:

- · Trigger pull with no errors: "Bang."
- · Trigger pull with 0 rounds remaining: No sound.
- The Assisted training mode features section explains Errors that can be activated to train for handling a range of pistol malfunctions. Each simulated error has its own sound. Coach mode audio guidance advances naming the error in level 1 to detailed instructions suitable for a beginner in level 3.

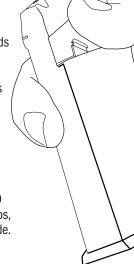
#### Manual Reload

To manually reload a TMag, press its Reload Lever while the TMag is out of the pistol and powered on. A quick press loads one bullet. A 2-SECOND press provides a full round count reload confirmed by an audible beep. The display promptly shows the new round count.



#### Training Videos

To view SIMO training videos, scan this code.



## **Returning to Live Fire mode**

# ALERT: Always follow basic gun safety protocols, critical from this point onward.

- · Point the firearm in a safe direction, with your finger off the trigger.
- · Release the TMag.
- · Rack the slide to return the gun to live fire mode.
- · Insert a regular magazine.
- · Rack the slide to load a bullet in the chamber if the magazine is loaded. You are ready to fire.

# **Troubleshooting**

## System not working/Lights aren't working/ Not making sounds.

- · Check the power switch is set to ON.
- · If yes but the TMag display is blank, press the Menu Button for 2 seconds to wake the TMag from Sleep Mode.
- · If the display remains blank, charge the TMag.
- · If the display functions but sound is too low, check the Volume setting.
- If the display functions and the safety LEDs work, but the system seems non-responsive, you may be experiencing a random simulated malfunction. Listen for coach mode to assist in clearing it; set Coach Mode to a higher level to get more prompts about clearing the error. After clearing the error, you may choose to adjust the Error frequency for more or fewer simulated malfunctions.

- · If the display is frozen and there is no simulated malfunction, turn TMag OFF and ON.
- If the display functions but the safety LEDs do not work, charge your TMag. If that does not resolve the LED problem, contact Mustang Industrial Design for support.

#### Coach mode is intrusive.

- · Understand that coach mode escalates if you have problems. Set to Off if you don't want feedback.
- Recommend leaving coach mode on at a low level, as it will prevent a lot of frustration dealing with simulated malfunctions.

#### I'm getting too many simulated malfunctions.

 Change the Error setting to a lower level. This may happen if you increased the level for a practice session and forgot to change it back after practicing.

#### Trigger is loose.

· Insert a TMag. If still loose, pull the trigger forward. If still not providing trigger resistance, remove the slide and check for dirt buildup or excessive fouling (this is rare).

# **Notes for Military, Law**

# Function check for pistols WITHOUT magazine safeties:

- Remove magazine from pistol.
- 2. Pull the slide to the rear and release (to cycle the slide).
- 3. Press trigger. Striker should fire normally and trigger remain to the rear.
- 4. Pull the slide to the rear and release.
- 5. Insert TMag. SIMO system safety lights should light.
- Press trigger. Trigger should engage SIMO system and return to the front.
- 7. Remove TMag from pistol. SIMO system safety lights should turn off.
- 8. Press trigger. Striker should not drop, and trigger should not return forward.
- Pull the slide to the rear and release. The trigger should return forward.
  - a. If trigger does not return forward, pull trigger slightly forward manually and repeat step 9. Trigger will return forward.
- Press trigger. Striker should fire normally and trigger remain to the rear.

# **Enforcement, & Armorers**

## Function check for pistols WITH magazine safeties:

- Remove magazine from pistol.
- 2. Pull the slide to the rear and release (to cycle the slide)..
  - a. Insert empty magazine.
- Press trigger. Striker should fire normally and trigger remain to the rear.
  - a. Remove empty magazine.
- 4. Pull the slide to the rear and release.
- 5. Insert TMag. SIMO system safety lights should light.
- Press trigger. Trigger should engage SIMO system and return to the front.
- Remove TMag from pistol. SIMO system safety lights should turn off.
  - a. Insert empty magazine.
- Press trigger. Striker should not drop, and trigger should not return forward.
  - a. Remove empty magazine.
- Pull the slide to the rear and release. The trigger should return forward.
  - If trigger does not return forward, pull trigger slightly forward manually and repeat step 9. Trigger will return forward
  - b. Insert empty magazine.
- Press trigger. Striker should fire normally and trigger remain to the rear.
  - a. Remove empty magazine.

# **Frequently Asked Questions**

#### Can I use aftermarket trigger parts in my SIMO-enabled pistol?

Some trigger components are specially designed for the SIMO system and aftermarket parts cannot be used or the SIMO system will not operate properly. Aftermarket trigger shoes (the trigger itself) may be substituted, depending on your manufacturer's guidance.

#### Can I replace the magazine release?

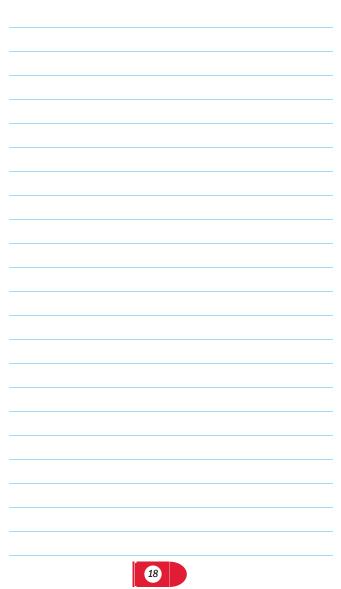
The magazine release functions with the SIMO system, but standard form-factor aftermarket magazine releases can be used with the SIMO system.

#### Why are the SIMO lights blue?

Blue is the commonly-accepted training color in use by law enforcement and military internationally. Having the system "show blue" when the SIMO system is active makes it clear when a firearm is in a safe mode.

Notes and Observations		









# Contact Us Today

Mikael Svensson VP International Licensing 1+ 310.498.7448, mikael.svensson@mustangid.com

Brian Bascom President 1+ 214.934.4334, brian.bascom@mustangid.com