

JBM Dry Fire

User Manual

January 23, 2025

SAFETY

The drills in this application are “dry fire” drills meaning no live ammunition is used. Do not have any live ammunition in your vicinity when performing these drills. Not on the table next to you, not in your shooting bag, your magazines or pockets are any other place accessible while dry firing.

Always follow the four rules of gun safety:*

Rule 1: ALL GUNS ARE ALWAYS LOADED

Rule 2: NEVER LET THE MUZZLE COVER ANYTHING YOU ARE NOT WILLING TO DESTROY

Rule 3: KEEP YOUR FINGER OFF THE TRIGGER UNTIL YOUR SIGHTS ARE ON THE TARGET

Rule 4: BE SURE OF YOUR TARGET

**The Modern Technique of the Pistol, by Greg Morrison, Gunsite Press, Paulden, Arizona, ISBN 0-9621342-3-6, Library of Congress Number 91-72644*

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Introduction

The JBM Dry Fire application is designed to be a companion app to the book *Refinement and Repetition: Dry-fire Drills for Dramatic Improvement*, by Steve Anderson, 2003 (available from Amazon). Refer to the book for explanations of the drills, par times and target layouts for the drills.

The application is meant to make the execution of drills more efficient by minimizing user input during drill execution. It allows the user to concentrate on the drill and execute by listening (or watching) the application and not having to start a timer or change par times.

NOTE: Nothing in this manual or the application is meant to imply any collaboration or business relation between JBM and Steve Anderson. Please do not contact Steve Anderson about this manual or application. Any questions should be directed to JBM.

Firearms used for drills are entered from the Settings tab. The app saves par times for each firearm-drill combination. This allows for the app to be used for multiple weapons or competitive divisions.

The drills in the book *Refinement and Repetition: Dry-fire Drills for Dramatic Improvement* are included as “standard drills”.

Standard drills can be edited, but that is not recommended as they may be updated during future releases. The Settings View has an option to reload the standard drills if required.

Each drill is implemented as a collection of ordered stages with different par times and timer options for each stage.

Quick Start

If you don't want to bother with reading this manual, you can quickly start using the application by taking the following steps:

- Add a firearm
 - Go to the Settings tab (tap “Settings” on the tab bar at the bottom of the screen).
 - Tap Firearms
 - Tap the “+” at the top right of the screen and enter your firearm manufacturer, description and caliber. Tap “Save”.
 - The new firearm should be visible in the firearm list.
 - Tap “Settings” at the top left of the screen to return to the Settings tab
- Configure the timer options on the settings tab.
- Select firearm and drill
 - Tap the “Dry Fire” icon at the bottom of the screen to show the Dry Fire tab.
 - Tap the text “<Select>” (this assumes that no firearm is currently selected) under the text “Firearm” and select a firearm from the list by tapping on the desired firearm.
 - Tap the text “<Select>” (this assumes that no drill is currently selected) under the text “Drill” and select a drill from the list by tapping on the desired drill.
- Adjust Par Time
 - Tap the “-” and “+” buttons to adjust the par time to the desired value.
- Ensure device volume is as desired
- Tap the Start button.

Drill Execution

Each drill is executed as a sequence of stages. Each stage has configurable delay times to provide the user time to reconfigure their weapon, to move to the stage start position, stow magazines, etc.

There is no user action required between stages.

The application has default values for all delays which attempt to provide good values for most users. If the user finds the default settings satisfactory, the rest of this section can be skipped. Understanding the details of the stage execution allows for fine tuning of the stage options, but it is not required if using the default settings.

The flow chart below (Figure 1: Stage Execution Sequence) shows the sequence for each stage of a drill. This sequence is repeated until all stages have been executed, completing the drill. There are a few things to note:

- The drill start delay and drill announcement is not shown. Both of these occur (depending on settings) at the start of the drill before the first stage.
- The stage start delay is the sum of the Settings *Stage Delay Time* and the drill's *Added Stage Delay*.
- The repetition start delay is the sum of the Settings *Rep Delay Time* and the drill's *Added Rep Delay*.
- If a stage does not use the timer, typical for slow motion stages, the time allotted for execution is the stage repetition delay. This repetition delay is configured for each stage as the *Rep Delay*.
- If a stage uses a timer, but the par time is *No Par*, the repetition starts with a timer beep and there is no stop beep. The execution time is the stage rep time.
- If a stage uses a timer and the par time is not *No Par*, the allotted time for execution is the drill par time as set on the Dry Fire tab +/- the par time adjustment.

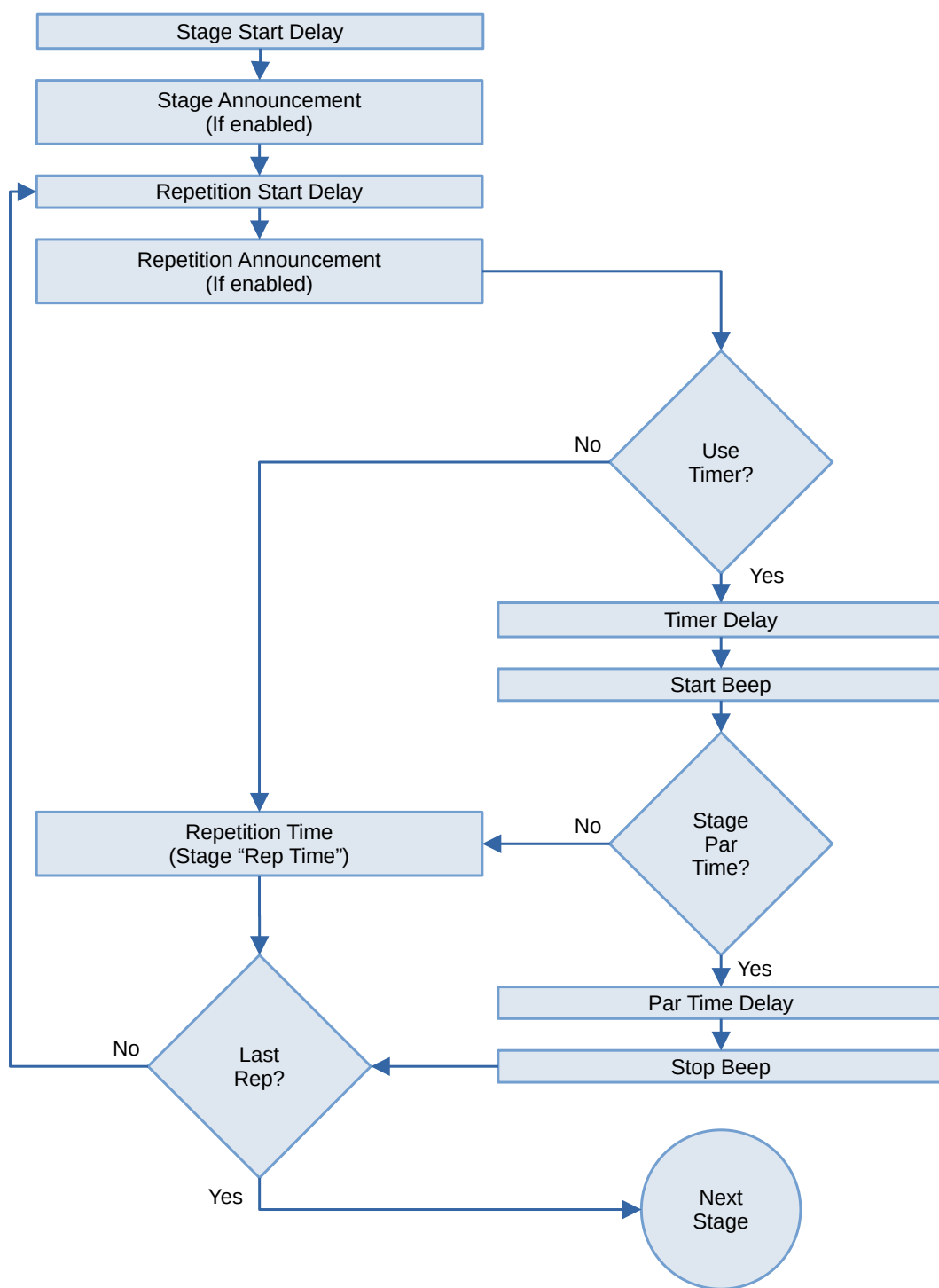


Figure 1: Stage Execution Sequence

Application Layout

The application is laid out with four “tabs” selected from the bottom of the screen:

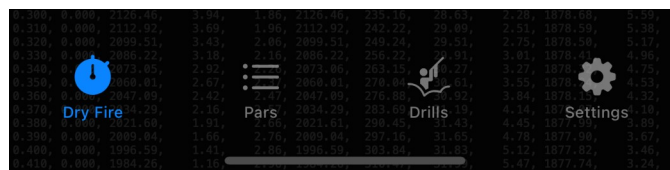


Figure 2: Tabs

The Dry Fire tab is used to execute drills. The current firearm and drill can be selected from this tab. The par time for the firearm-drill combination is set from this tab.

The Pars tab is used to store a history of par times. This helps the user track progress over time.

The Drills tab is used to view, edit, add and delete drills.

The Settings tab is used to configure application wide settings.

Dry Fire Tab

The Dry Fire tab, shown below, is used to select drills and firearms, set par times and execute drills. It is divided into four sections:

- Engine section provides status about the current stage, repetition and timer
- Data section shows the currently selected firearm and drill and the associated par time. The firearm and drill may be selected by tapping the drill or firearm name and selecting a new drill from the list. Adjustment of a drill par time is performed by tapping the “+” and “-” buttons. Par times are to the nearest tenth of a second.
- Controls allow the user to start, pause, stop and navigate stages.
- Status is below the controls and shows the current state of the drill execution including announcements and timings.

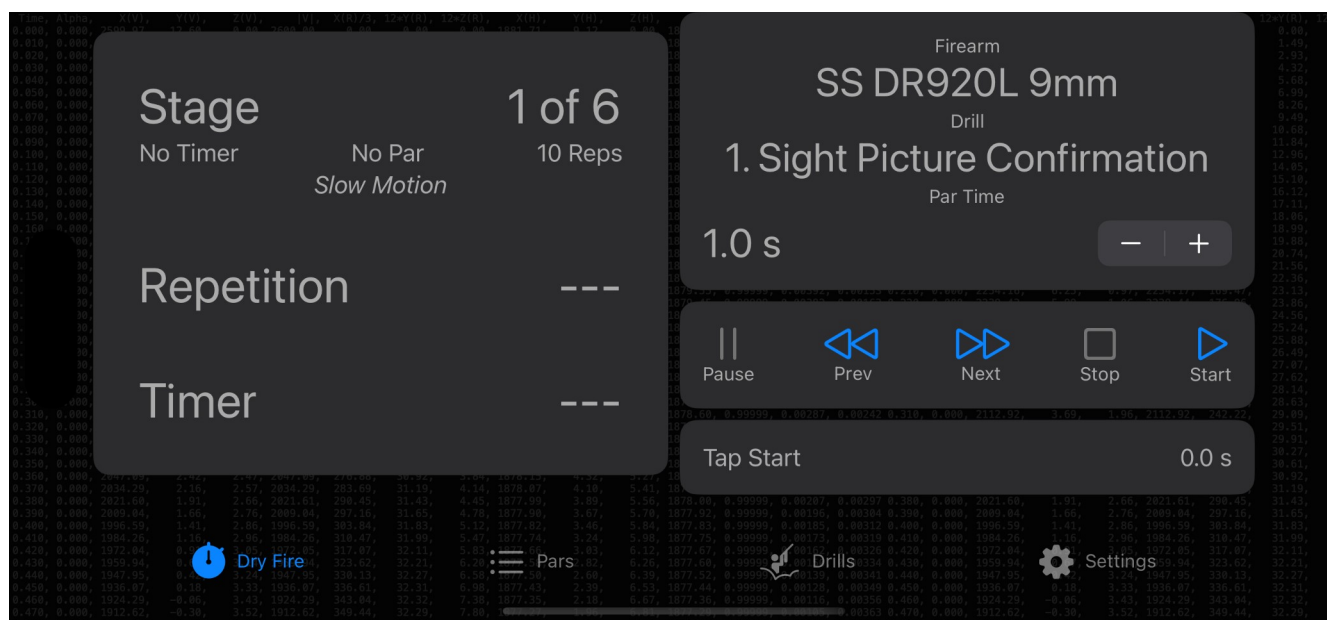


Figure 3: Dry Fire Tab

Pars Tab

The pars tab manages and displays a list of saved par times for the current drill and firearm combination. This is used to create a history of successful par times to show drill progress. As the user successfully achieves a par time, tap the Pars tab icon at the bottom of the screen to open the Figure 4: Pars Tab. The current par time may be saved by tapping the save button at the top right (left of the chart button).

Saved par times may be removed by swiping left on par time entry in the saved history and tapping the delete button.

The Figure 5: Par Time History Chart is opened by tapping the chart button at the top right (right of the save button). Tap the dismiss button to close the chart.

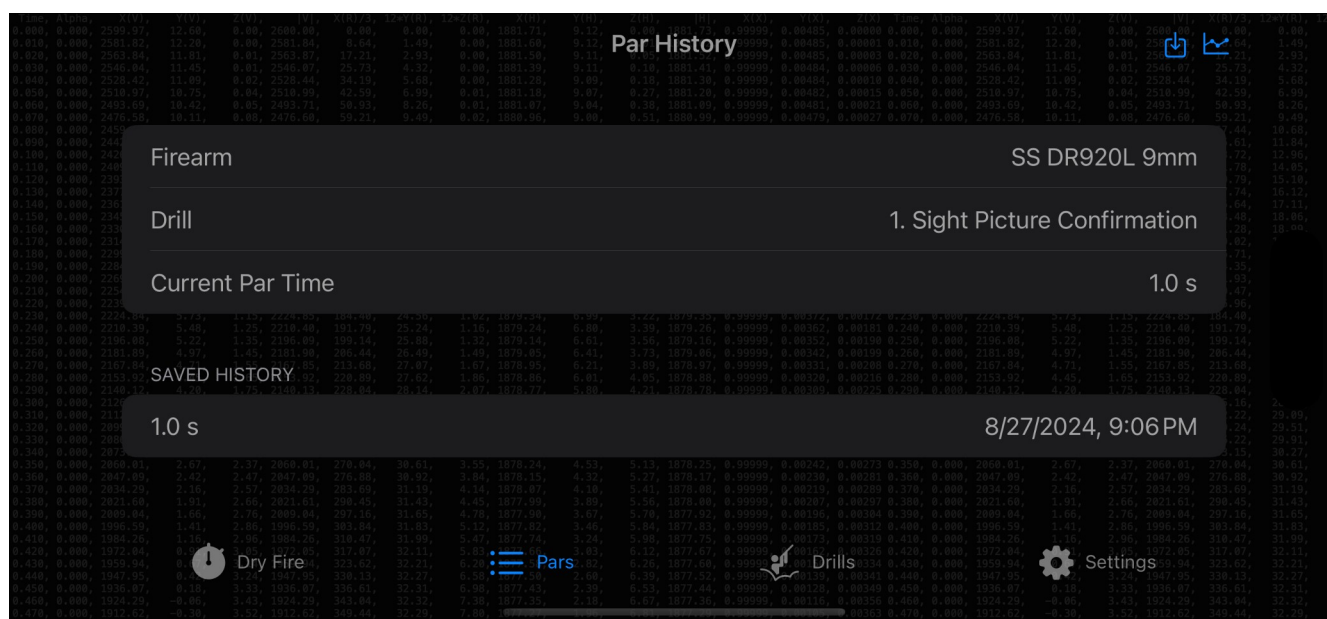


Figure 4: Pars Tab

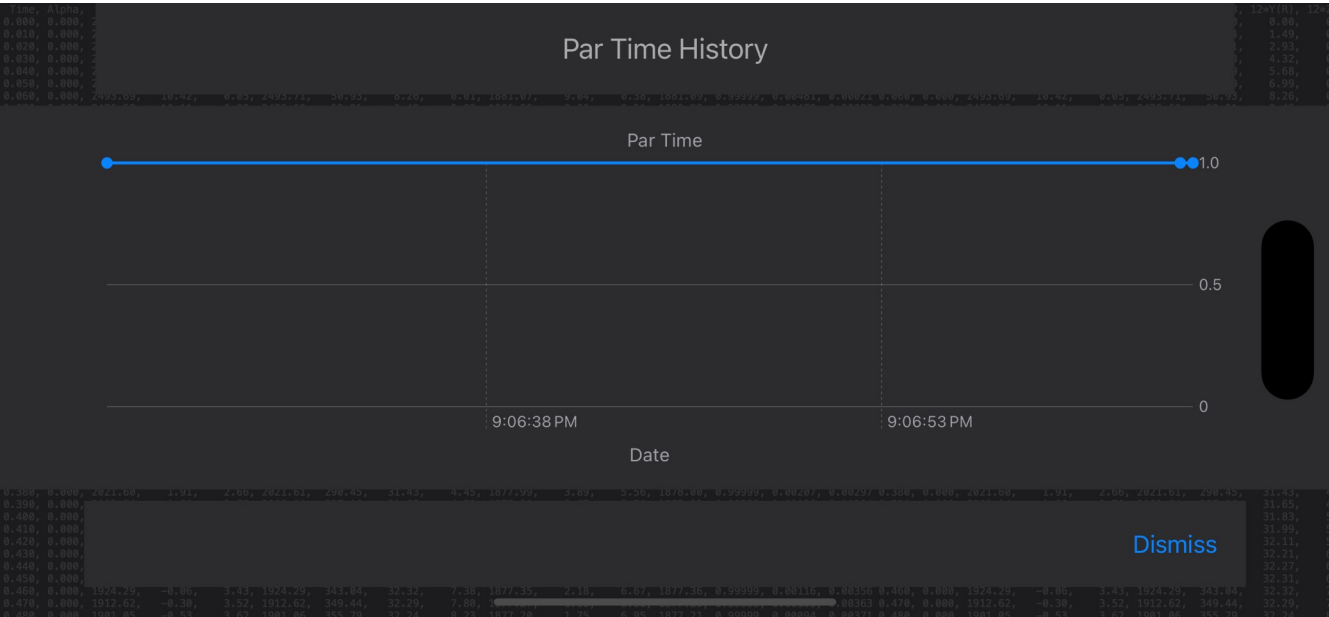


Figure 5: Par Time History Chart

Drills Tab

The drills tab is used to add, modify and delete drills. Tap the drills icon at the bottom of the screen to show the Figure 6: Drills List Tab. This tab shows a list of drills added to the application. By default, all the standard drills are installed.

Drills are added by tapping the “+” button at the upper right. Filter options are selected by tapping the filter button to the left of the “+” button.

One may swipe downward on the drill list to expose the search bar. Just type text to be searched for in the search bar and all drills with the text in the description fields (e.g. name) will be shown.

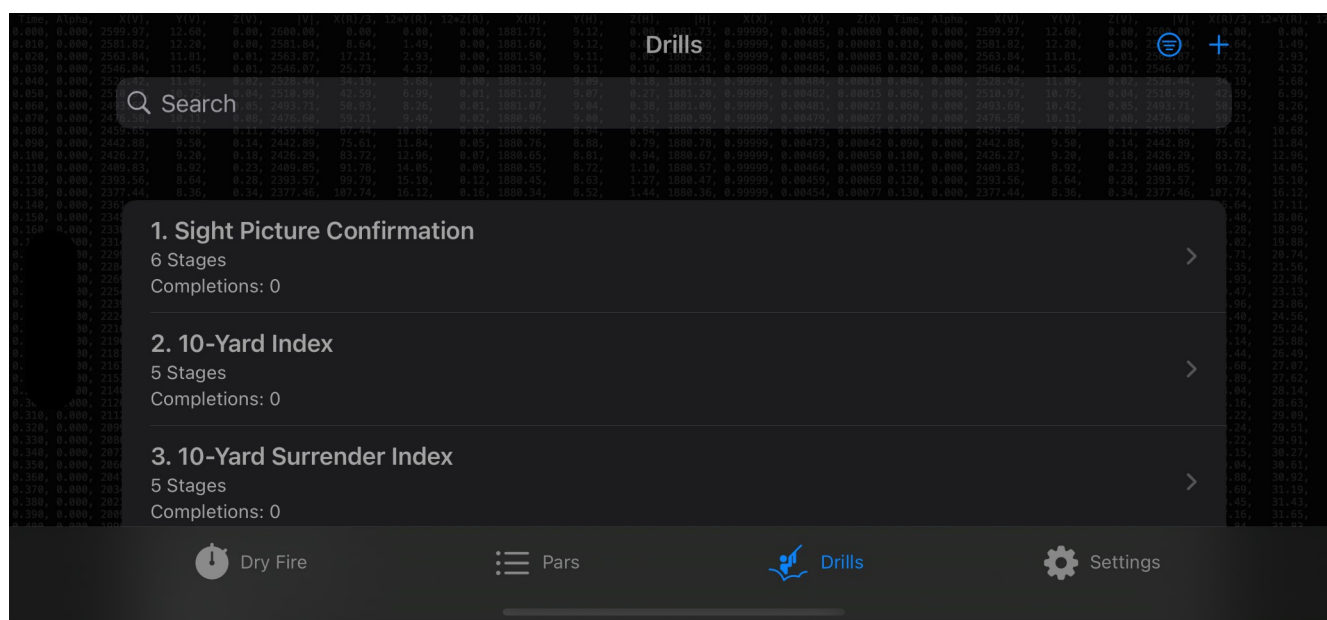


Figure 6: Drills List Tab

To delete a drill swipe left on the drill you wish to delete and tap the delete button as shown in Figure 7: Drill Delete and Clone. Additionally, one may clone drills (useful in creating new drills) by swiping left on the drill to be cloned and tapping the green clone button. The cloned drill has the same name as the cloned drill with the added text “Cloned” added to the drill name.

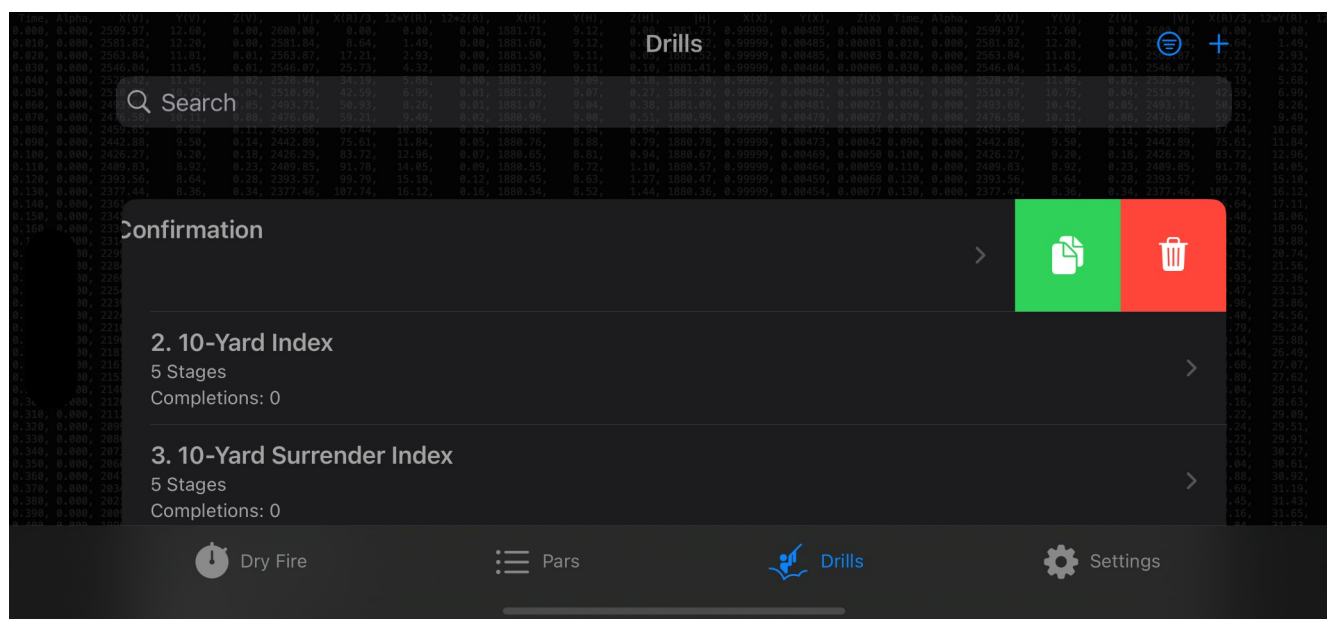


Figure 7: Drill Delete and Clone

NOTE: Deleting preinstalled standard drills is not recommended. Preinstalled drills can be restored from the Settings tab.

Editing Drills

Tap a drill to edit it using the drill data view. Drill data is divided into three sections, the description which contains the drill name, the drill data and drill stages. Drill stages are covered in the next section, Drill Stages.

Description

- **Name:** The name of the drill. This field can be any text.

The first section (shown in Figure 8: Drill Description) is the drill description with on field, the name. This is a test string and can be any text.

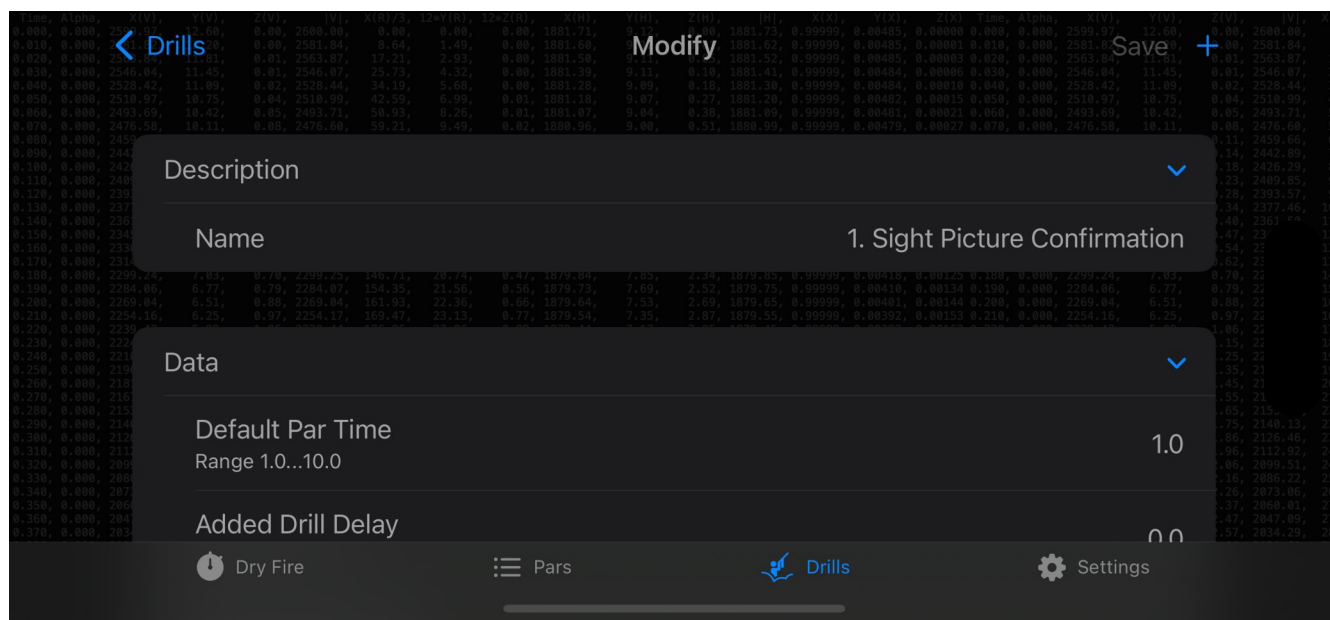


Figure 8: Drill Description

Drill Data

The second section is the drill data (shown in Figure 9: Drill Data). It contains the following data

- **Default Par Time:** The default par time, in seconds, for the drill. This is the par time shown the first time a drill is selected.
- **Added Drill Delay:** Delay, in seconds added to the global settings drill start delay time. This allows for additional start time prior to the drill start. This value is typically zero.
- **Added Stage Delay:** Delay, in seconds, added to the global settings stage start delay time. This allows for additional time to start a stage if the stage setup requires more time. This value is typically zero.
- **Added Rep Delay:** Delay, in seconds, added to the global settings rep delay time. This allows the user additional time to prepare for the next repetition if required (e.g. return to start position in a stage that requires movement). This value is typically zero.
- **Completions:** The number of times the drill has been completed. This value may be set to zero by tapping the clear button next to the number of completions.

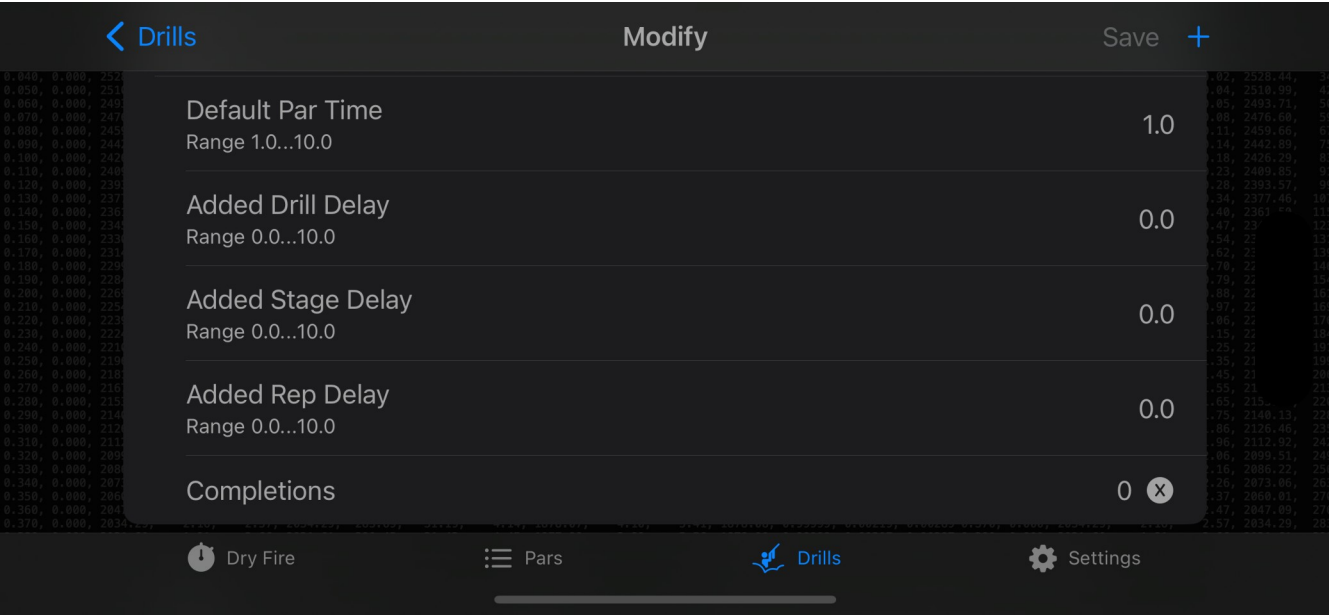


Figure 9: Drill Data

Drill Stages

The third section of the drill data (shown in Figure 10: Drill Stage List) is a list of drill stages.

Stages may be added to a drill by tapping the “+” button in the upper right of the drill data view.

Stages may be deleted or clone (similar to drills above) by swiping left on the stage and tapping the delete or clone button.

Stage Data

Stage data contains the following data (shown in Figure 11: Stage Data)

- **Number:** The stage number. Stages are ordered by number. It is up to the user to ensure the stages are numbered correctly (no duplicates) for proper stage ordering.
- **Repetitions:** Number of repetitions to be performed for this stage.
- **Notes:** Short concise stage notes to be announced in the stage announcement. This should be very short text (e.g. “Slow motion”).

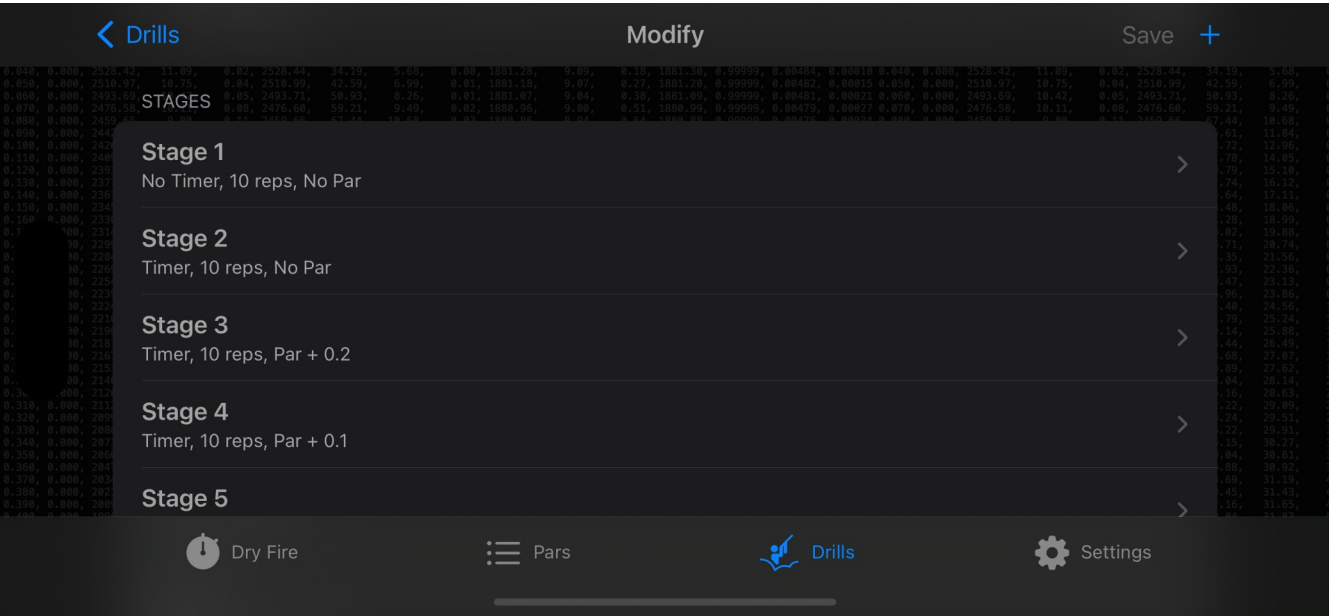


Figure 10: Drill Stage List

Stage Timer

- **Use Timer:** If disabled, there is no start or stop beep for repetitions. The
- **Par Time:** This field is only visible if *Use Timer* is enabled. If “No Par” is selected for this field, the timer starts the repetition and the repetition is complete when the rep time has elapsed. If this field is set to a par time adjustment (+/- time in seconds), the timer starts the repetition and a stop beep is sounded when the repetition is complete. The completion time is the drill par time plus the stage par time adjustment.
- **Rep Time:** This field is only visible if *Use Timer* is false or *Par Time* is set to “No Par”.

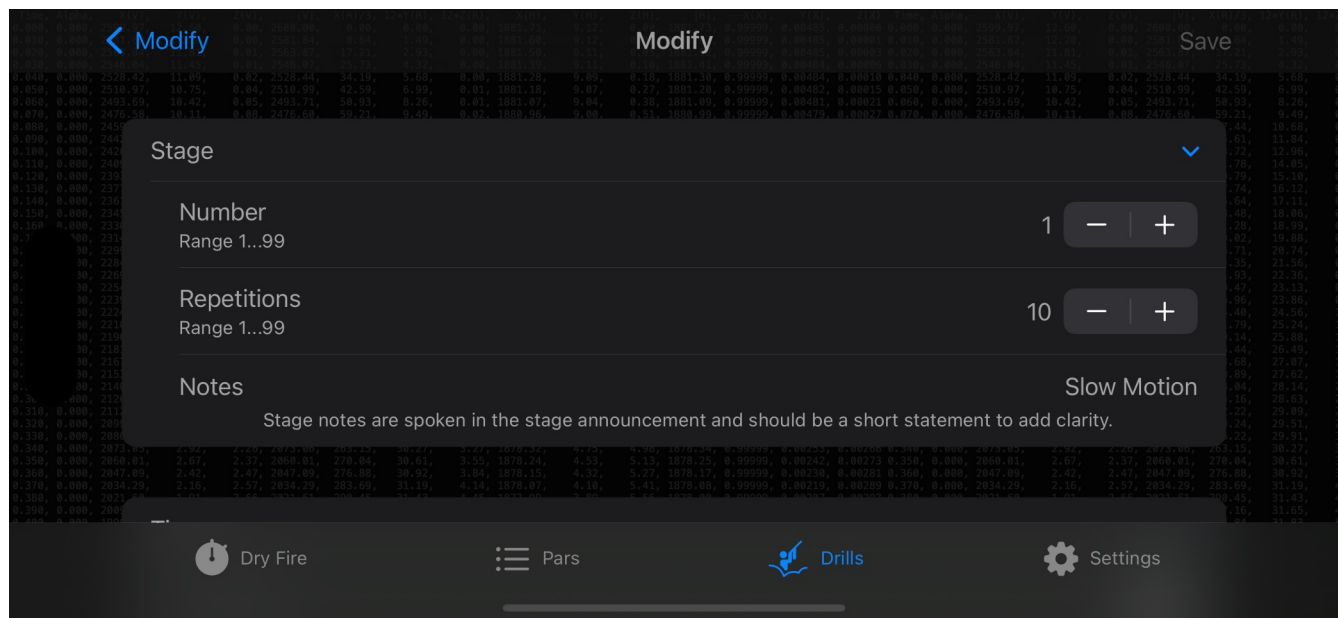


Figure 11: Stage Data

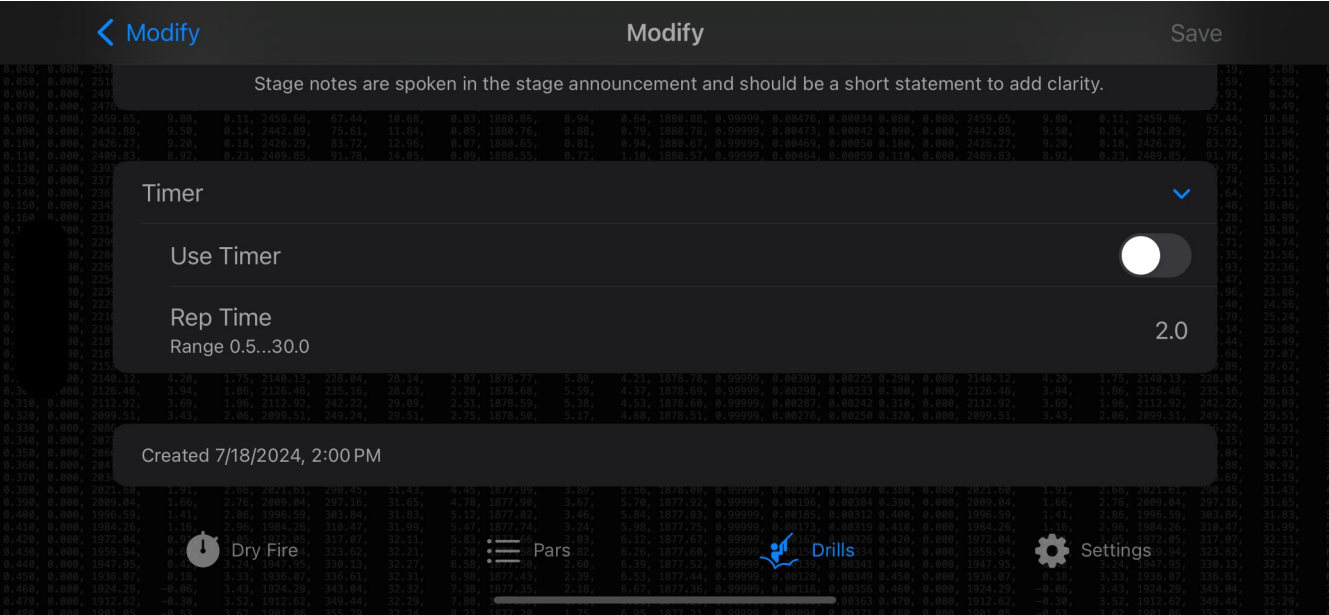


Figure 12: Stage Timer

Settings Tab

The Settings tab provides a list of application settings. Settings are divided into the following sections: Selections, Drill, Timer, Firearm, Application and About.

Selections

Shows the current selected drill and firearm (selections can also be made from the Dry Fire tab). To select a firearm or drill, tap the current selection and select from the provided list by tapping on the desired drill or firearm. Firearms must be added via the firearms option before selection.

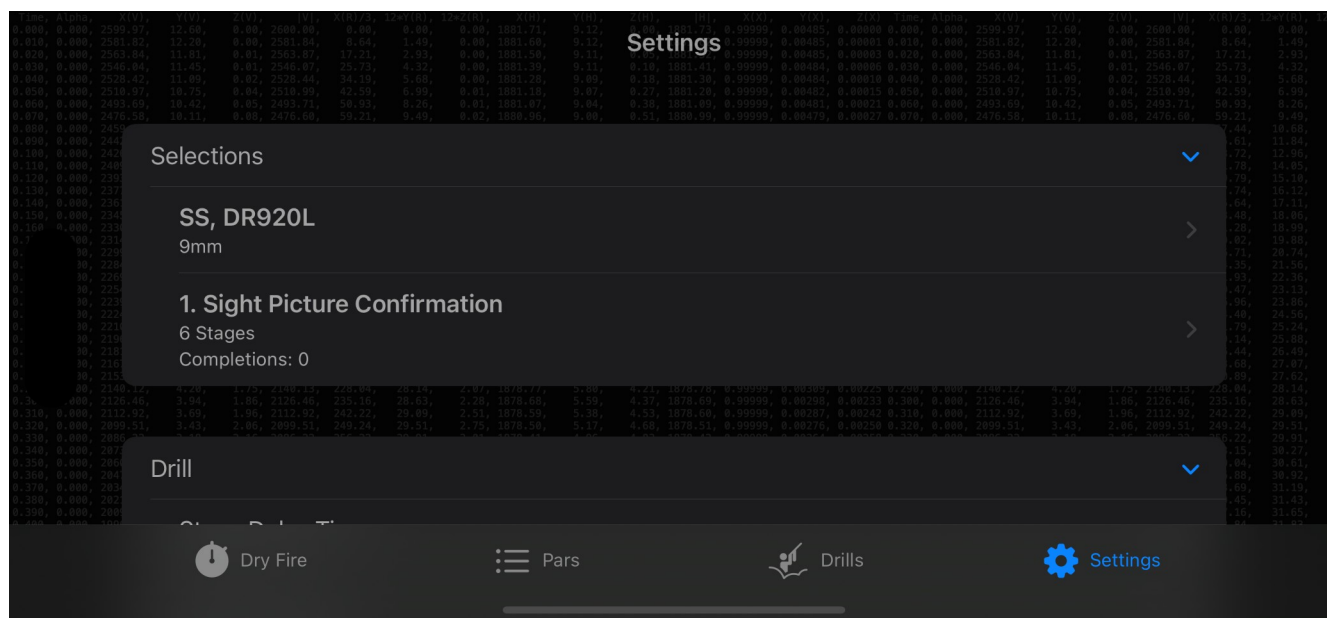


Figure 13: Settings Tab - Selections

Drill

Drill settings are shown in Figure 14: Settings Tab – Drill.

- **Drill Start Delay:** pause before each drill start. Gives the user time to adjust and be ready before the drill starts.
- **Stage Delay Time:** pause before each stage start. Gives the user time to adjust and be ready for the stage. Default is five seconds.
- **Rep Delay Time:** Pause before each rep (not included in timer delay). Typically time spent re-holstering, stowing magazines, etc. Default is two seconds.

Voice

Voice settings are shown in figure Figure 15: Settings Tab – Voice.

- **Enable Voice:** Turns on/off voice options. If enabled, a “drill complete” announcement is made when the drill is complete. If not enabled, all other voice options are hidden.
- **Announce Drill:** If enabled, the application announces the drill name. Only available if “Enable Voice” is enabled.
- **Announce Stage:** If enabled, the application announces the stage by number. Only available if “Enable Voice” is enabled.
- **Announce Rep:** Similar to “Enable Stage”. If enabled, the application announces each repetition. Only available if “Enable Voice” is enabled.
- **Announce Stand By:** If enabled and the timer is used on the stage, the words “stand by” will be announced prior to starting the shot timer. Only available if “Enable Voice” is enabled.

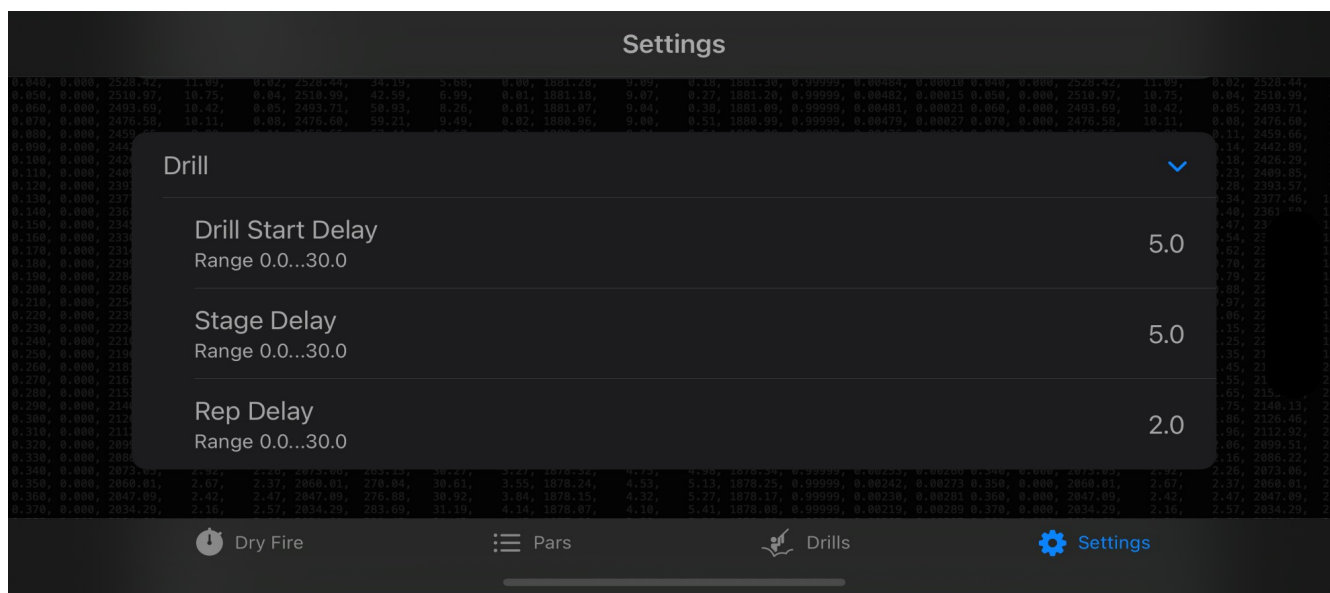


Figure 14: Settings Tab – Drill

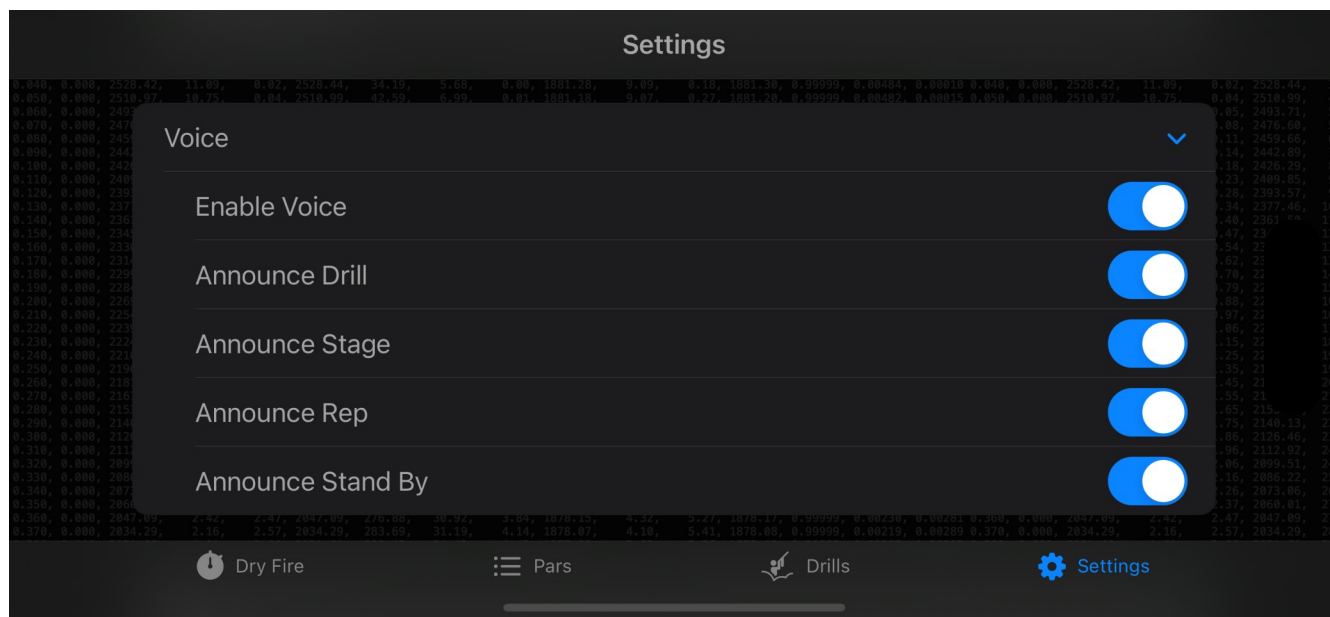


Figure 15: Settings Tab – Voice

Timer

Timer settings are shown in Figure 16: Settings Tab - Timer & Firearms. Available settings are the timer start mode and the delay parameters. Allowed options for start mode are:

- **Immediate:** Start beep immediately after the repetition start delay. There are no parameters associated with immediate mode.
- **Delay:** Start beep is fixed time after repetition start delay. Delay mode has one parameter, the delay time. It can be in the range from zero to five seconds.
- **Random:** Start beep is random time after repetition start delay. Random mode has two parameters, minimum time and maximum time. In this mode, the start time is randomly chosen from the interval [minimum time...maximum time] seconds.

Firearms

Tap to show a list of current firearms. The firearms list view can be used to edit or add firearms. See Firearms for more information on editing firearm data.

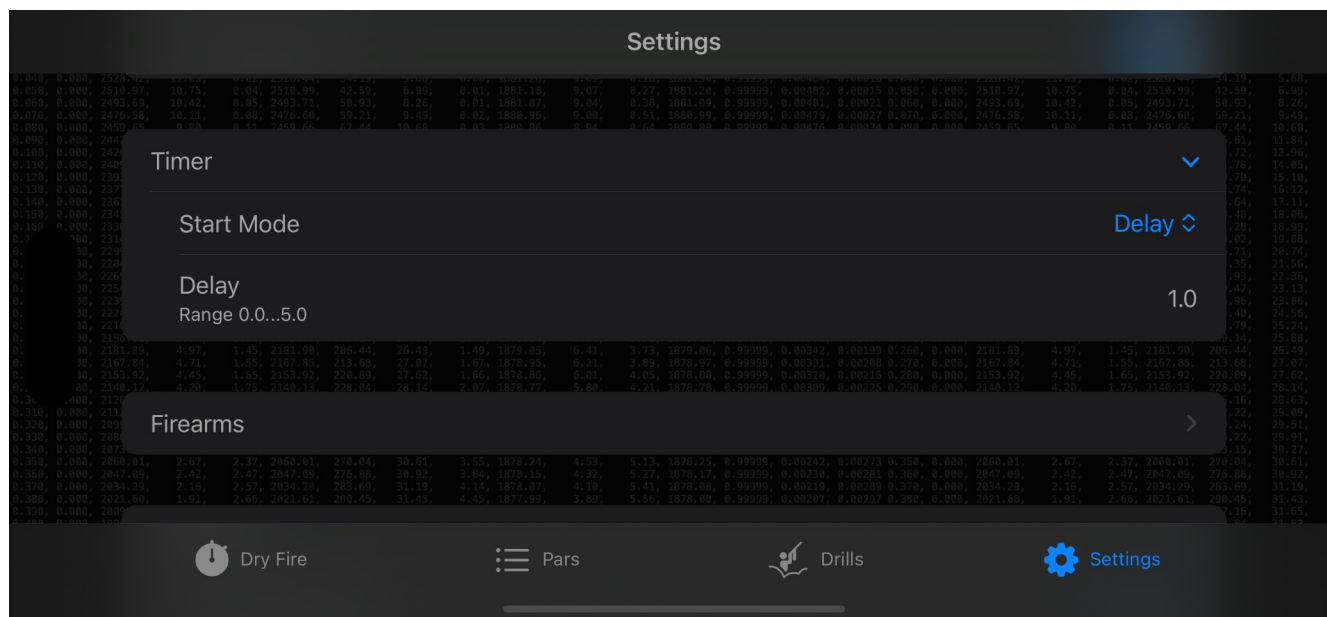


Figure 16: Settings Tab - Timer & Firearms

Application

Application options include auto capitalization for text entry and the drill library.

- **Auto capitalization:** Defines how text capitalization is performed when entering text values (e.g. firearm manufacturer). Choices are
 - **None:** No capitalization
 - **Characters:** All characters are capitalized
 - **Words:** The first character in each word is capitalized
 - **Sentences:** The first character in the first word of a sentence is capitalized.
- **Drill Library:** Provides a button to reload the drill libraries standard drills.

About

Shows About dialog with logo, version, copyright and link to JBM's website.

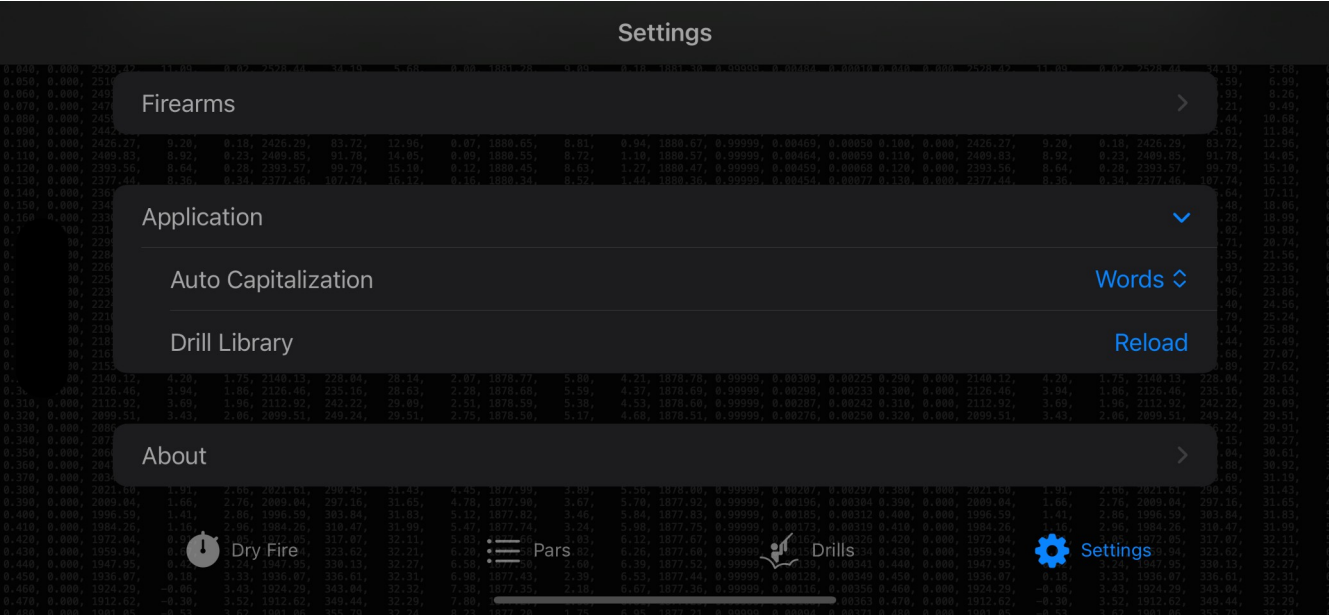


Figure 17: Settings Tab - Application & About

Firearms

The firearms list is accessed from the Settings tab by tapping the “Firearms” link. Figure 18: Firearms List shows the list of existing firearms. Existing firearms may be edited by tapping the firearm in the list. Firearms may be removed from the system by swiping left on the firearm to be deleted and tapping the red delete button. Firearm entries may be cloned by swiping left and tapping the clone button.

Firearms may be added by tapping the “+” button at the top right. This opens the Figure 19: Firearms Data View which is used to enter the firearm data. To save the entry tap the “Save” button at the top right. To discard any changes, tap the “Firearms” button at the top left.

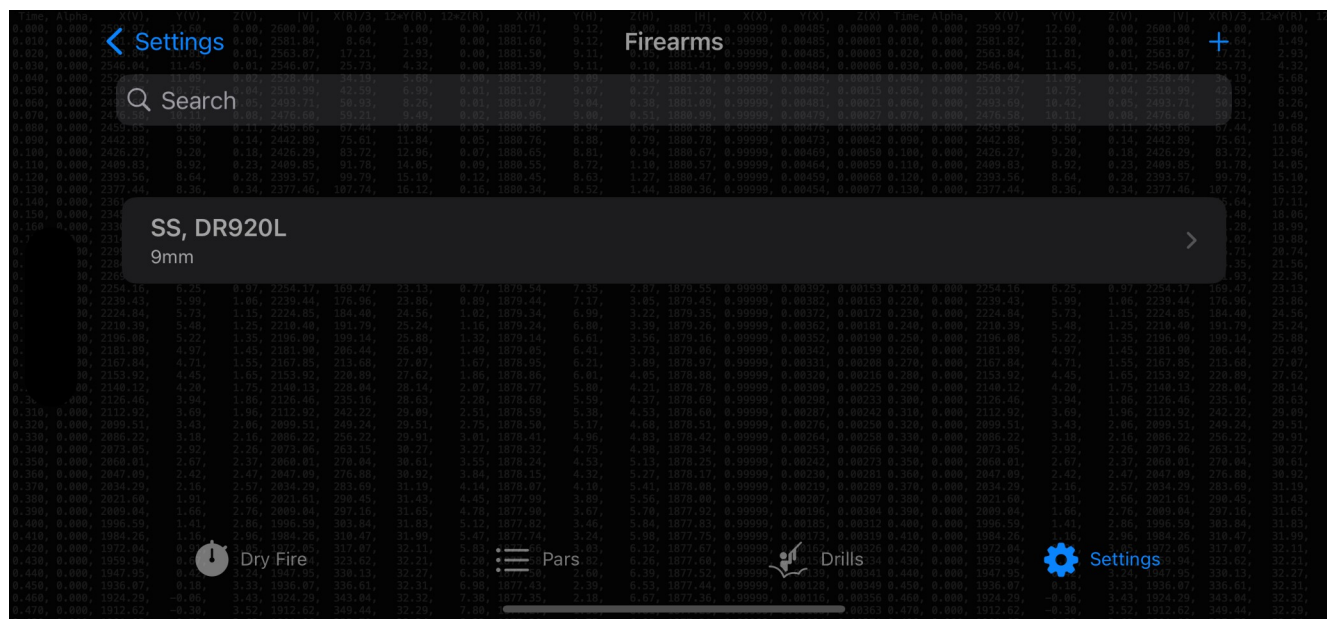


Figure 18: Firearms List

To return to the Settings tab from the firearms list, tap the “Settings” button at the upper left of the firearms list.

Each firearm has description fields for

- **Manufacturer:** Firearm manufacturer
- **Model:** Firearm model description
- **Caliber:** Firearm caliber

[illegible]

Figure 19: Firearms Data View