

## KST1000 Shot Timer

## **User Guide**



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### Congratulations on the Purchase of Your KST1000 Shot Timer

For additional help, support videos, and answers to frequently asked questions, visit <u>www.kestrelballistics.com/help</u> or contact us at (800) 784-4221 Mon-Fri: 9am-5pm EST.

### GETTING TO KNOW YOUR SHOT TIMER





#### TIMER SCREEN





Guide	
User	
Timer	
Shot .	
000	
KST-	

Button	Timer Screen Function
GO	Start Timer
	Enter REVIEW
\$	Enter SETTINGS
	Mute (Pause) On / Off
	Backlight On / Off
	Quick Review Shots
	Adjust Sensitivity

### **REVIEW SCREEN**

Times/Splits Indicator					Strings
Change in Settings	Times	5	4	3	Scroll right to view more
	Last	2.98	2.02	3.06	
	1	1.45	1.95	1.42	
011-	2	1.62	2.11	2.06	
Snots Carall down to	3	2.35	2.02	2.38	
view more	4	2.41		2.48	
	5	2.98		3.06	
	6				
	7				
	8				
	9				
	10				
	11				Cloar
					Clear
	🗘 Se	ttings	•	clea	Clear all saved strings information on REVIEW screen

Button	Function	Button	Function
GO	Start Timer	000	View Times
EE	Exit Review	<u>بې</u>	Backlight On / Off
\$	Enter Settings		Execute Command / Enter Sub Menu

#### SETTINGS SCREEN

Menu Field				
"" Indicates	a Sub Menu -	Name	PRESET 1	Setting/Option
Press Select to	o Enter	Sens	3-22LR	Toggle Left/Right
		Start Delay	2.5 sec	to change
		Random	2.5-3.5 sec	
		1st Par	Off	
		2nd Par	Off	
		3rd Par	Off	
		Start Loop	Off	
		Buzzer Volum	e Low	
		Review	Time	
		Device Setting	js	
		Diagnostics		Scroll Down/Up Arrow
				Indicates more options
		🎝 exit	<b>▲</b> adjust	offscreen
		-		
Button	Function		Button	Function
GO	Start Timer			Scroll to Setting
ΞΞ	Enter Review	N		Execute Command / Enter Sub Menu
\$	Enter Setting Exit Sub Me	gs / :nu	<u>ب</u>	Backlight On / Off
	Toggle Setti	ng	<u> </u>	

### LET'S GET STARTED

## Remove battery door and insert batteries.

Timer runs on two CR123 batteries.



# **2** Press the POWER button to turn the Timer on.

To turn the timer off, press the **POWER** button and hold for 2 seconds.



## **B** Press the GO button to start the timer.

Press the **GO** button to display the Timer screen. The buzzer will sound to indicate that the Shot Timer has started to record a new string.

"0.00" will flash on the screen until the Shot Timer hears the first shot.

If you have entered settings for **Delay** or **Random** in the **Settings** menu, the Shot Timer will use that setting as the countdown to the buzzer. If you enter settings for both, the Shot Timer will combine the two values to create the countdown.



## **4** Press the REVIEW button to view stored strings.

In the **Settings** menu, set the Review setting to **Times** or **Splits**.

**Times** displays the interval between the sounding of the buzzer and the shot.

**Splits** displays the interval between the listed shot and the previous shot.

The Shot Timer can store up to 50 strings. After 50 strings have been recorded, each new string replaces the oldest stored string, which is deleted.

Use the **Clear History** command in the **Device Settings** menu to clear the **Review** screen.

Times	5	4	3	
Last	2.98	2.02	3.06	
1	1.45	1.95	1.42	
2	1.62	2.11	2.06	
3	2.35	2.02	2.38	
4	2.41		2.48	
5	2.98		3.06	
6				
7				
8				
9				
10				
11				
🗘 Se	ttings	•	l cle	ar

#### Press the SETTINGS Button to Adjust Settings.

Scroll to a setting and push  $\leftarrow$  to enter its sub menu.

An elipsis (...) indicates that an item has a sub menu.

Name	PRESET 1
Sens	3-22LR
Start Delay	2.5 sec
Random	2.5-3.5 sec
1st Par	Off
2nd Par	Off
3rd Par	Off
Start Loop	Off
<b>Buzzer Volume</b>	Low
Review	Time
<b>Device Settings</b>	S
Diagnostics	

🏚 exit

adjust

Name	The name of the selected Preset.	

- **Sensitivity** The Shot Timer's sensitivity setting. This is the noise level required for the Shot Timer to register a shot. The Sensitivity line will blink when the Shot Timer registers a shot at the current setting, allowing you to test and set your preferred level.
  - **Note:** Additional sensitivity customizations can be made in the Sensitivity sub menu.
- Start DelayA fixed time delay between when you press the<br/>GO button and when the buzzer sounds.
- RandomA random time delay between when you press the<br/>GO button and when the buzzer sounds.
  - Note: When they are both set, the Start Delay and Random Start values combine to create a total delay time.

1st Par	The time between the Go signal and a second buzzer, indicating the end of the 1st Par time.
2nd Par	The time between the Go signal and an additional buzzer, indicating the end of the 2nd Par time.
3rd Par	The time between the Go signal and an additional buzzer, indicating the end of the 3rd Par time. (Follow-on Par times are locked if previous Par times are set to Off.)
Start Loop	The timer automatically restarts when the set LOOP time elapses. Used for repetitive hands-free training. The loop will automatically end if any button is pressed or after 30 loops.
Buzzer Volume	High volume is appropriate for outdoor use. Medium or Low are intended for dryfire or indoor use.

- Review The type of records viewable on the REVIEW screen. The REVIEW screen displays either Time (the interval between the sounding of the buzzer and the shot) or Splits (the interval between the listed shot and the previous shot).
  Device Settings Additional settings for setting up your Shot Timer.
- **Diagnostics** Advanced settings tuning and troubleshooting.

# ${\bf 6}$ Use the Sensitivity sub menu for additional sensitivity configuration.

This screen can be used to fine tune each sensitivity level to fit your desired use. Settings apply to each sensitivity level individually. The default values for each level should be treated as a reasonable starting point for the listed firearm type.

2-Pistol	< >
Sens	15000
Echo	0.11 sec
Buzzer mute	Off
Par Buzz	Normal
Filter	Off
<b>Reset to Defaults</b>	Go
🏚 exit	

Sens	The Shot Timer's sensitivity threshold. This is the noise level required for the Shot Timer to register a shot. The top preset line will blink when a shot is registered at the current setting, allowing you to test and set your preferred level. For quieter shots, lower this value; for louder shots, raise this value.
Echo	The amount of time after a shot is recorded during which the timer ignores any follow-on sounds. This avoids recording echoes off berms or walls as shots. To help you calibrate Echo accurately, after a shot is recorded, the Shot Timer will display 1 Shot if it heard 1 shot or 2+ Shots if it heard two or more. You can then set (adjust?) the Echo time accordingly.
Buzzer Mute	If selected to On, the Shot Timer will not listen for shots while the start buzzer is active. The "+" value will add additional time during which the microphone will not listen for shots. This can be helpful if the buzzer is configured with an extremely low sensitivity setting. This does not affect the Par buzzer.

Par Buzz	In Quiet mode, the Par buzz will fire (sound?) at a Low volume level instead of the level selected with the Buzzer Volume control in the main menu.
Filter	A frequency filter will be applied to measured sounds. This will impact sensitivity settings and is not recommended for general use.
Reset to Defaults	Resets the sensitivity settings for only the currently shown preset. They are returned to the factory default settings. This will not affect sensitivity settings beyond those currently displayed.

## **7** Use the Device Settings sub menu for additional settings.

An elipsis (...) indicates that an item has a sub menu.

Elapsed Time Bluetooth Auto Shtdwn	Off On 15 min
Factory Restore	Go
🗘 exit 🛛 🜗	adjust

Elapsed Time	Displays a counter on the Timer Screen that shows the elapsed time since the buzzer sounded.
Bluetooth	Turns Bluetooth on or off.
	Continuous use will have a small impact on battery life.
Auto Shutdown	The amount of time without a button press until the timer turns off. Recording a shot will not restart the auto shutdown time.
Clear History	Use the <b>Clear History</b> command in the <b>Device</b> <b>Settings</b> menu to clear the <b>Review</b> screen.
Factory Restore	Resets all presets, settings and Review History to factory conditions.
About	Displays device information such as firmware version, serial number and more

## **8** Check for firmware updates.

**Note:** A good rule of thumb is to check for updates once a year. You can also follow us on Kestrel Ballistics social media to get the newest update announcements.

1. Download the **Kestrel LiNK Ballistics** app on your mobile device.

- 2. On your phone and your Shot Timer, ensure **Bluetooth** is enabled.
  - a. Go to the **Settings** screen and press Select.
  - b. Highlight Bluetooth and make sure it is turned **On**.
- 3. With Bluetooth enabled, open the **Kestrel LiNK Ballistics** app on your device.
- 4. On the Kestrel LiNK Ballistics screen, select Connect Device.







- 5. On the Available Devices screen, select your Shot Timer. The app automatically checks for firmware updates. If new firmware is available, the app will ask you if you want to update.
- 6. Select Update.

**7.** The app tells you when the update is complete.







### **Q** Use the Quick Review option.

On the **TIMER** screen, you can quickly review your times, without having to navigate to the **REVIEW** screen.

On the TIMER screen, press the Left or Right button.

This will cycle through the shots in the current string.

For instance, starting at shot #9 and pressing on the **LEFT** button brings you to the previous shot, #8. Pressing again brings you to shot #7.



#### **NOTES:**



### PROUDLY DESIGNED AND BUILT IN THE USA



KestrelBallistics.com/kestrel-plain-language-warranty

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