



# Rock Hawk - Basics of Use

This document guides you through setup and use of the Rock Hawk timing system for curling. While Rock Hawk supports different timing scenarios, this guide details timing hog-to-hog.

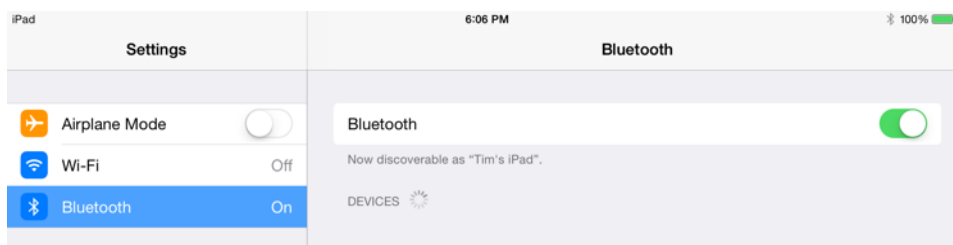
## 1. Laser safety

Rock Hawk timing beams use a laser to cast light on a sensor inside the sensor box. Please follow these guidelines for safe use.

- never look directly at the laser beam
- always turn the laser off when moving it
- never point a laser at anyone
- never point a laser at a car or aircraft

## 2. Turn on Bluetooth

The Rock Hawk app communicates with the Rock Hawk timing beams using Bluetooth. Be sure to turn on Bluetooth on your device (using the Settings app on your device).



## 3. Place the timing beams

Each timing beam consists of two boxes, a laser box and a sensor box.



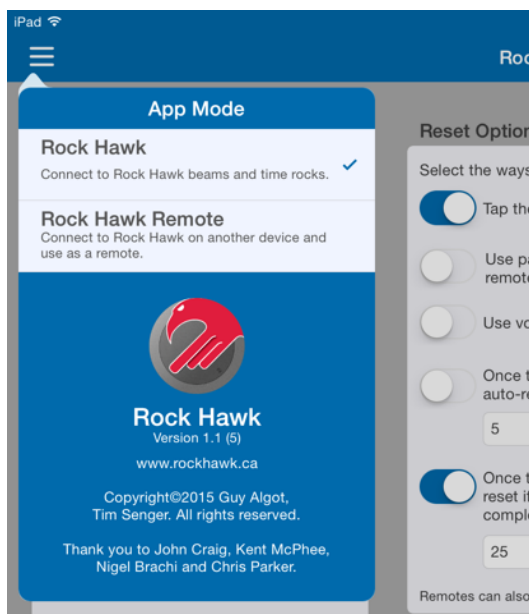
At the near hog line, place a laser box on one side of the sheet and a sensor box on the opposite side (fronts facing each other). Turn each box on.

The laser must be aimed directly at the sensor hole. To align vertically, turn the levelling knob on the top of the laser box. To align horizontally, simply rotate the box on the ice with your hand. The neoprene pad on the bottom makes it easier to align horizontally. (If you find it difficult to aim the laser precisely, you can align it close to the sensor, then slide the sensor box “in to view” so the laser hits the sensor hole.)

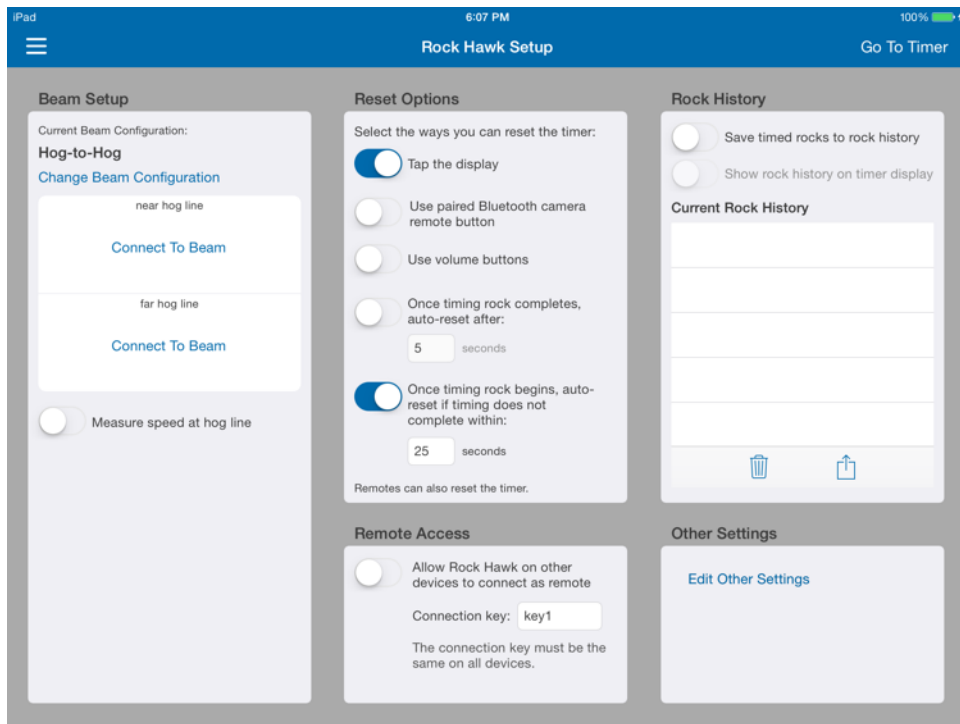
Using the above procedure, place a second timing beam at the far hog line.

#### 4. Open Rock Hawk on your iPad, iPhone or iPod touch

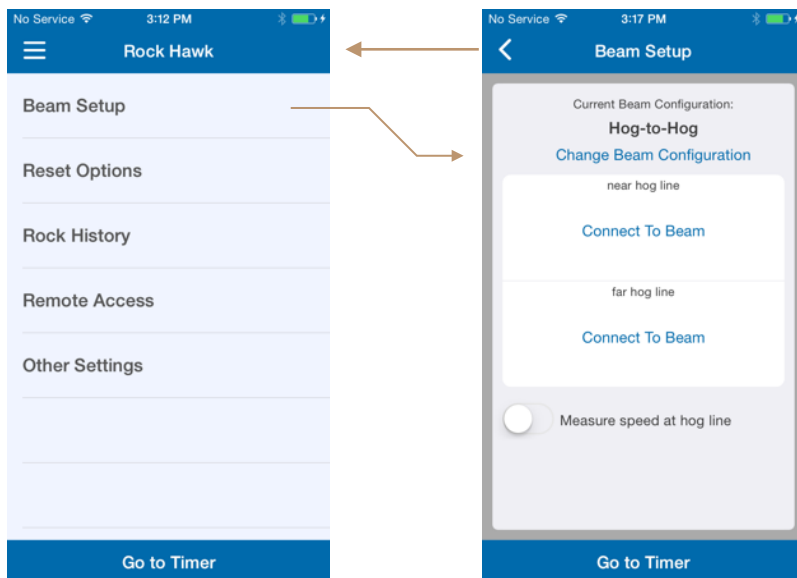
Rock Hawk operates in one of two modes: Timer mode or Remote mode. If you do not see “Rock Hawk Setup” (iPad) or “Rock Hawk” (iPhone/iPod touch) at the top of the screen, tap the menu button at the top-left and select the “Rock Hawk” app mode.



On an iPad, all settings appear on one screen. On an iPhone or iPod touch, different settings appear on different screens.



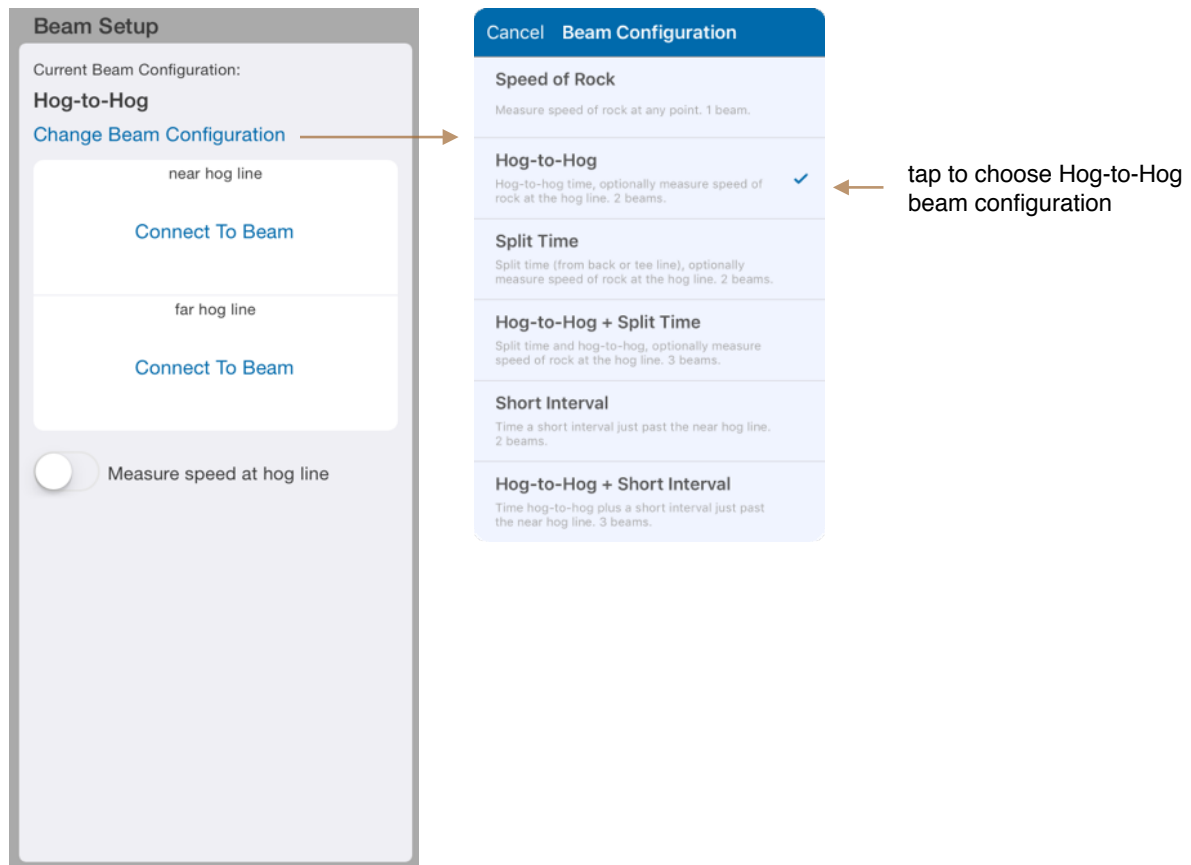
On an iPhone or iPod touch, tap the settings type (e.g. “Beam Setup,” “Reset Options,” etc.) to display the settings. On any settings screen, tap the left-pointing button at the top-left of the screen to return to the settings menu screen.



## 5. Select the Hog-to-Hog beam configuration

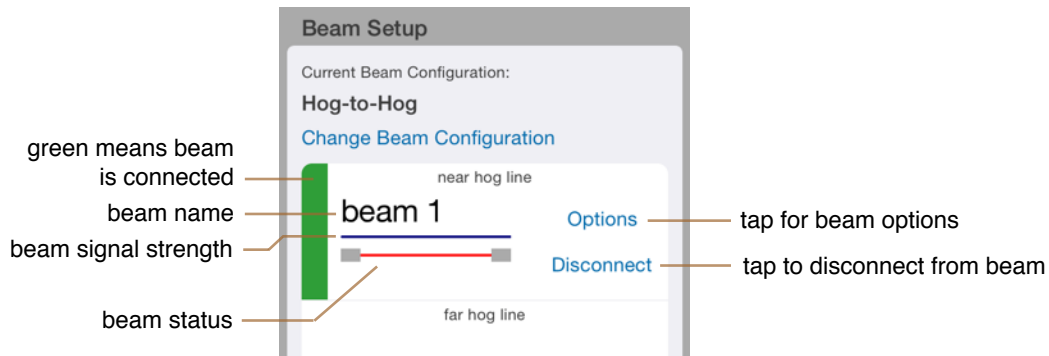
On an iPhone or iPod touch, tap “Beam Setup” to display the settings.

If the current beam configuration is not Hog-to-Hog, tap “Change Beam Configuration” and select “Hog-to-Hog” from the list.



## 6. Connect to the timing beams

Tap the “Connect” button for the near hog line timing beam. You’ll see a list of nearby timing beams. Each timing beam is identified by name and can be seen labelled on the top of each sensor box. Tap the name of the beam that you placed at the near hog line. Rock Hawk will connect to the beam.



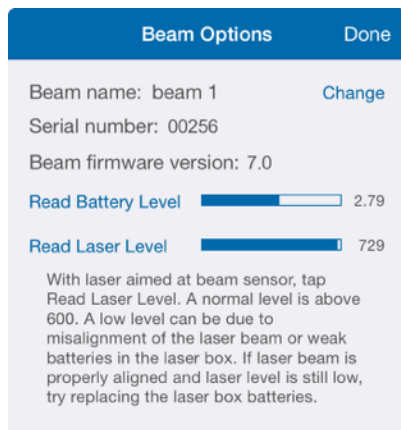
(Note: If you tap a beam name to connect and a connection is not established (and the timing beam remains unconnected with a “Connect To Beam” button), try connecting again. Rarely, you may find that connecting requires two attempts.)

Repeat the above procedure to connect to the beam at the far hog line.

Once connected to a timing beam, you can break the beam to test that it is operating correctly. You’ll see the beam status (i.e. the red line) temporarily break and you’ll hear an audible sound. Note that this illustration of the beam does not indicate whether or not the beam’s laser is accurately aligned to hit the sensor. Laser alignment can be checked only visually.

If the beam does not operate correctly, try the following:

- Tap the “Options” button next to the beam name. You’ll see the Beam Options screen.



- Tap the “Read Battery Level” button. If the battery level indicator shows low (below 2.5), try replacing the batteries in the sensor box.
- If the sensor box battery level is adequate, next, while the laser is aimed at the sensor hole, tap the “Read Laser Level” button to see the current strength of the laser; it may be that the laser box batteries are weak and need to be replaced. If the laser is properly aligned yet the laser level is less than 500, please replace the laser box batteries.

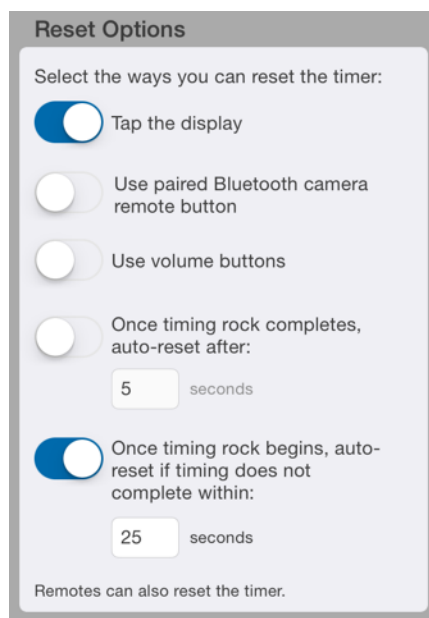
## 7. Optionally measure rock speed

The Hog-to-Hog beam configuration has an option for measuring the speed of the rock at the near hog lone. To select this feature, turn on the “Measure speed at hog line” switch.

Note: Measuring rock speed requires that the rock completely pass the beam before any other objects reach the beam. Check the position of your broom when rocks you deliver break the near hog beam to be sure your broom does not overlap the rock.

## 8. Select reset options

Rock Hawk offers both manual and automatic reset options.



The screenshot shows a settings menu titled "Reset Options". Below the title is the instruction "Select the ways you can reset the timer:". There are five toggle switches, each followed by a label. The first toggle, "Tap the display", is turned on (blue). The second, "Use paired Bluetooth camera remote button", is off (grey). The third, "Use volume buttons", is off (grey). The fourth, "Once timing rock completes, auto-reset after:", is off (grey) and has a numeric input field set to "5" with the unit "seconds" to its right. The fifth toggle, "Once timing rock begins, auto-reset if timing does not complete within:", is turned on (blue) and has a numeric input field set to "25" with the unit "seconds" to its right. At the bottom of the menu, there is a small text note: "Remotes can also reset the timer."

For manually resetting the timer, you can select options to tap the display, press the volume buttons, or even press a camera remote shutter button that you’ve paired with your iOS device.

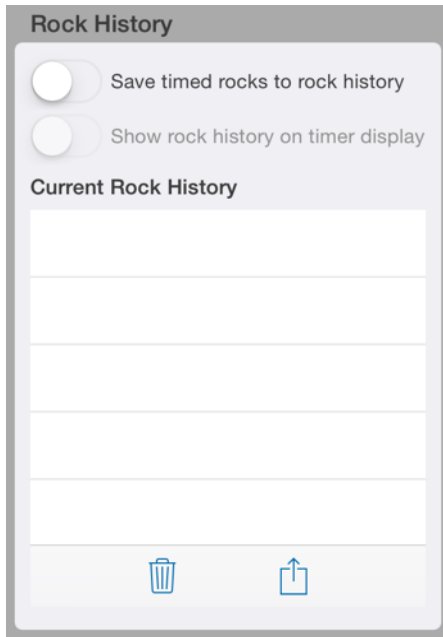
For automatic resetting, Rock Hawk will reset once timing of a rock has completed and a specified number of seconds have passed. For individual practice, a setting of around 25 seconds can work well. For team practice, a shorter interval, say 5-10 seconds means that Rock Hawk will be ready to time another rock shortly after timing of the previous rock completes.

For cases where timing of a rock begins but does not complete (perhaps the rock picks and is stopped before it reaches the final timing beam), you can select the last reset option. If timing does not complete within a certain number of seconds, Rock Hawk will automatically discard the rock timing data and reset the timer.

Select your preferred reset options.

## 9. Select rock history options

As you time rocks, Rock Hawk can accumulate the timing data. That way you can look back at your rock times, and you can email the data afterwards so it can be imported into a word processor or spreadsheet app for further analysis. We call this timing data the rock history.

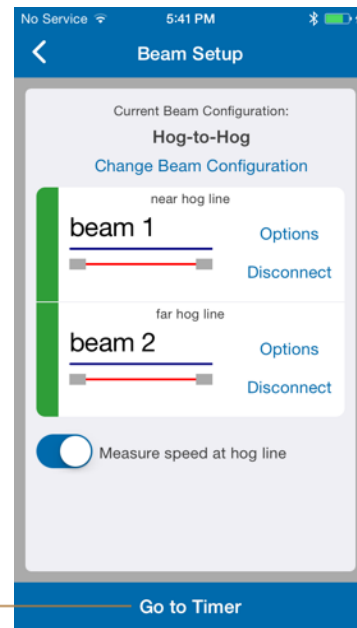
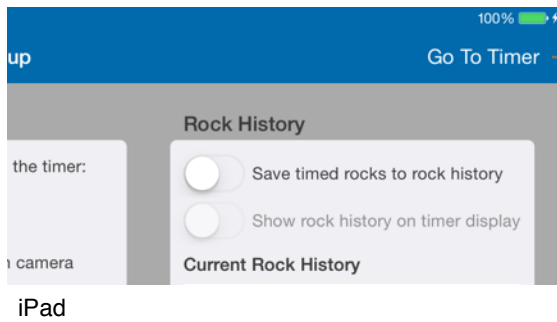


If you enable the rock history (by turning on the “Save timed rocks to rock history” switch), you can also choose whether or not to show the rock history on the timer display. If you are starting a practice and the rock history still has timing data from the last time Rock Hawk was used, you can clear the history by tapping the trash button below the rock history list.

Note: When you finish using Rock Hawk and press the Home button on your device, the app will go into the background so you can use other apps. If the rock history has timing data, it will still be there the next time you open Rock Hawk. However, if you quit the app, or if your device quietly quits Rock Hawk because it needs more memory for other work (or if you shutdown your device), any rock history data will be lost.

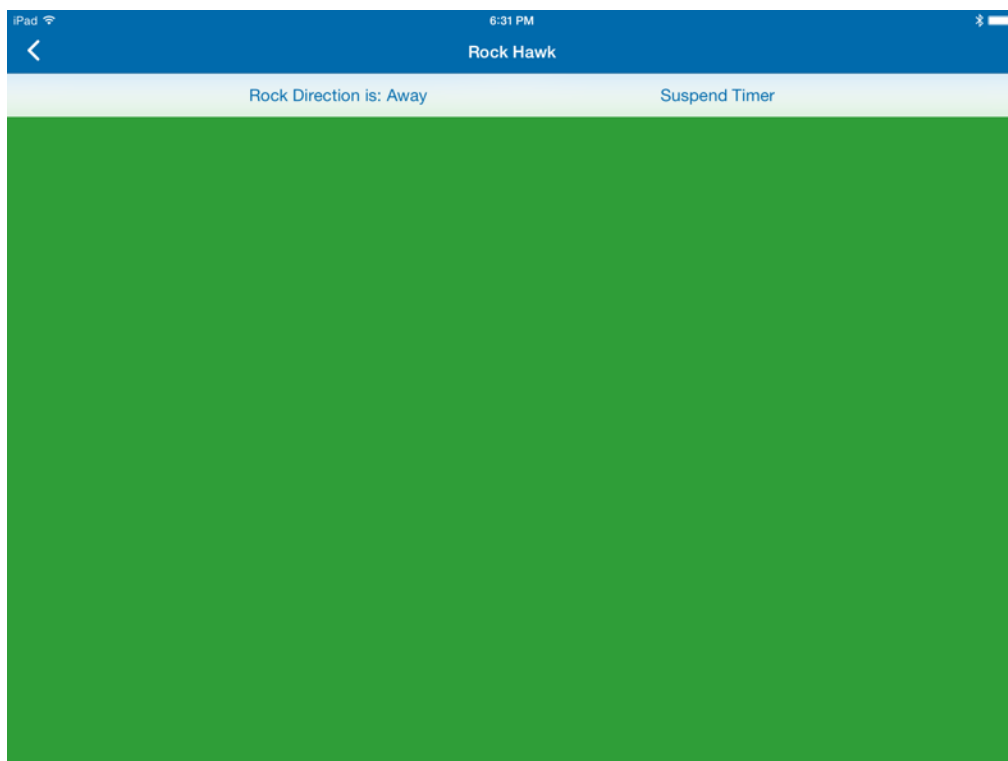
## 10. Time rocks

To begin timing rocks, tap the “Go To Timer” button. On an iPad this button is at the top-right of the screen; on an iPhone or iPod touch, it is at the bottom.



tap to go to timer

iPhone / iPod touch



iPad, ready to time

The background of the timer display can be one of four different colours: green, black, blue and red.





Timer is ready to time



Timer is timing



Timing has completed



Timer is suspended or inactive, or a timing beam has disconnected

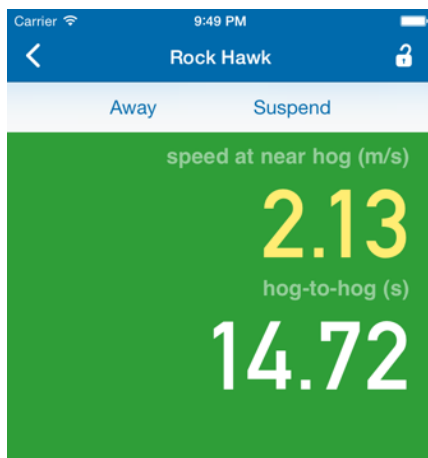
Before timing a rock, be sure the display background is green. If it is not, reset the timer (see “Select reset options” earlier).

When the timer is ready to time, care must be taken to not accidentally break the first beam that the rock will break. All other beams can be broken without effect.

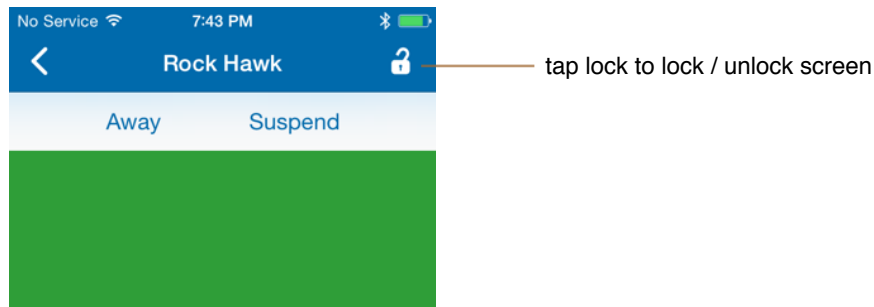
Once the rock breaks the first beam, in this case the beam at the near hog line, timing starts and the timer display background changes to black. At this point care must be taken to not accidentally break the next beam that the rock will break; the beam at the far hog line in this case. All other beams can be broken without effect.

When the last beam is broken to complete timing, the timing results are displayed and the display background colour changes to blue. At this point, any beam can be broken without effect. You then reset the timer to get ready to time the next rock (see “Select reset options” for more information).

Depending on the beam configuration being used, the display will show either split or interval times (i.e. the time it takes a rock to travel between two beams), or the speed of the rock at certain beam positions, or both. To help visually distinguish between split or interval times and rock speed, the numbers are displayed using different colours—white for split and interval times, yellow for rock speed.



When using an iPhone or iPod touch, Rock Hawk allows you to lock the timer display screen so you don't accidentally tap buttons. You'll see a lock button at the top-right of the screen. Tap it to lock the screen.

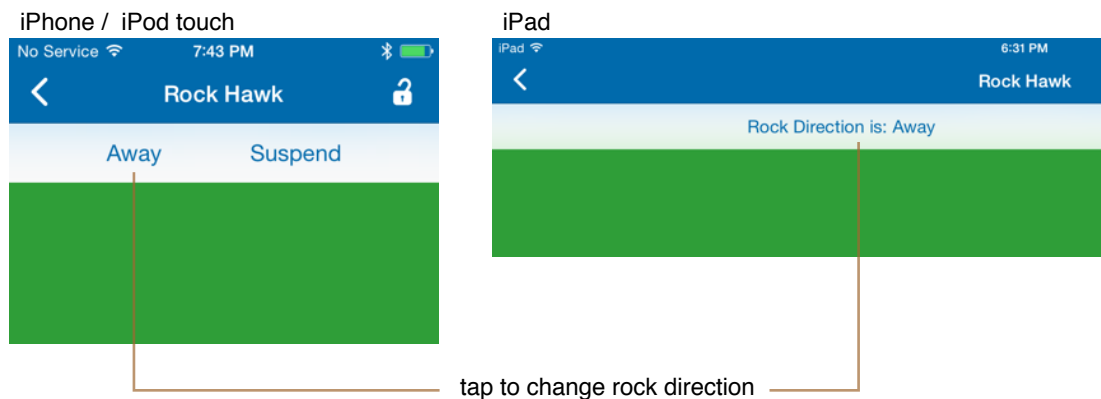


To unlock the screen, simply tap the lock button again.

## 11. Changing rock direction

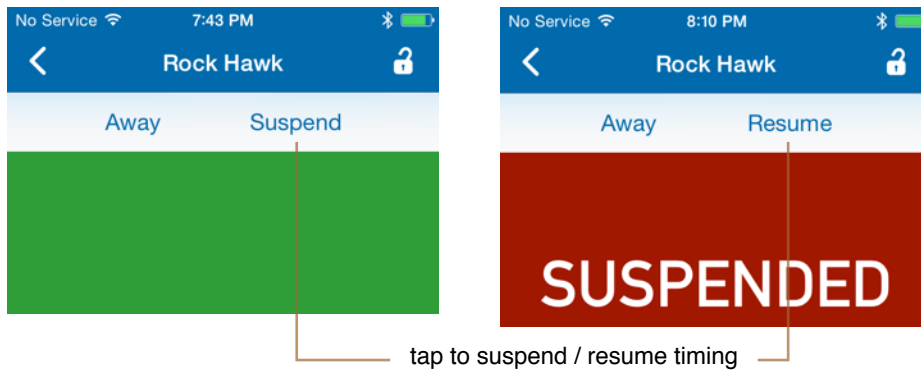
By knowing which direction rocks are being thrown, Rock Hawk can reduce the number of accidental beam breaks. At any point, whether Rock Hawk is ready to start timing or timing is in progress, Rock Hawk knows which timing beam will be broken next. All other beams can be broken without effect.

When you change rock direction, be sure to tap the rock direction button on the timer display.



## 12. Suspending the timer

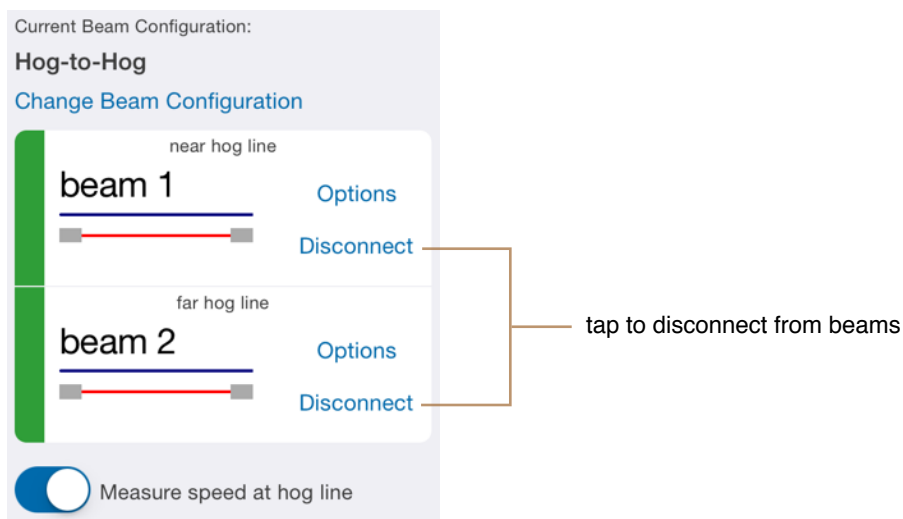
While using Rock Hawk, you can temporarily suspend the timer function so that you can practice other skills. Tap the "Suspend" button to suspend timing. Tap the "Resume" button to resume timing. While suspended, the timer display background is red with the word "SUSPENDED."



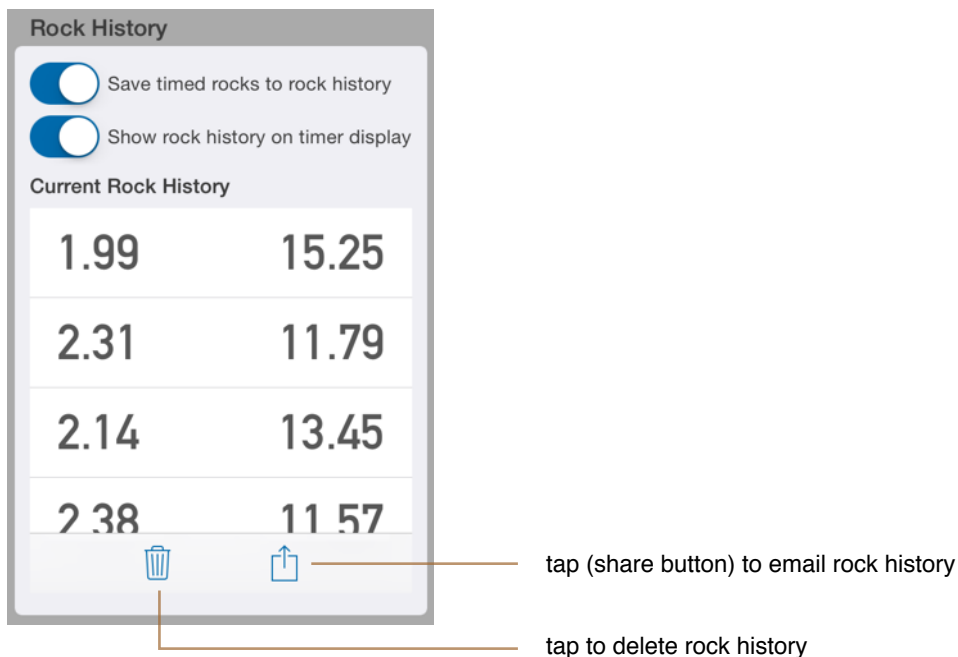
### 13. When you're finished practicing

When you're done timing rocks, it's easy to put Rock Hawk away. Tap the left-pointing button at the top-left of the screen to return to the settings screen. If you're using an iPhone or iPod touch, you may need to tap "Beam Setup" to display that screen.

For each connected timing beam, tap the "Disconnect" button to disconnect.



If you've been saving timing data to the rock history, you can email it to any email address. First though, if you're using an iPhone or iPod touch, go to the Rock History settings screen. You'll see a summary of the timing data for each rock timed.



Tap the Share button. A screen appears allowing you to optionally enter information about your practice.

**Email Rock History**

Skip Continue Cancel

Club/Rink:

Sheet:

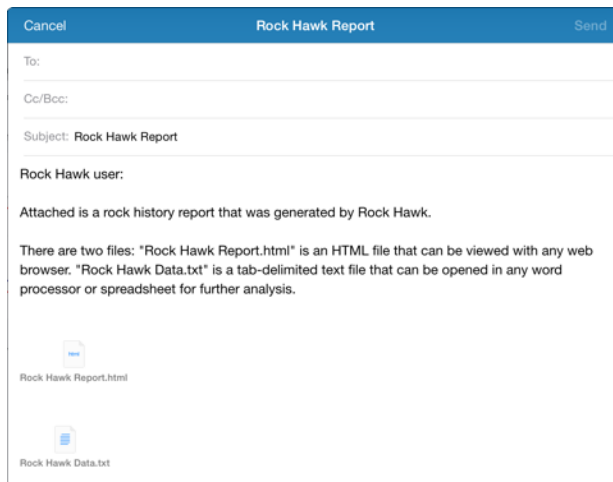
Team/Players:

Remember above for next time ☐

Notes:

Optionally enter information about the location and players for the rocks timed.

Enter the information and tap the “Continue” button, or tap the “Skip” button if you don’t want to enter that information. You’ll then be prompted to specify one or more email addresses to which the rock history report will be sent.



Note: Your device does not have to be connected to the Internet when you address and send the rock history report. The message will be placed in your Outbox and sent when an Internet connection is next established.

The rock history is stored using two different formats - HTML for viewing with a web browser, and text for opening with a word processor or spreadsheet app to further analyze the data.

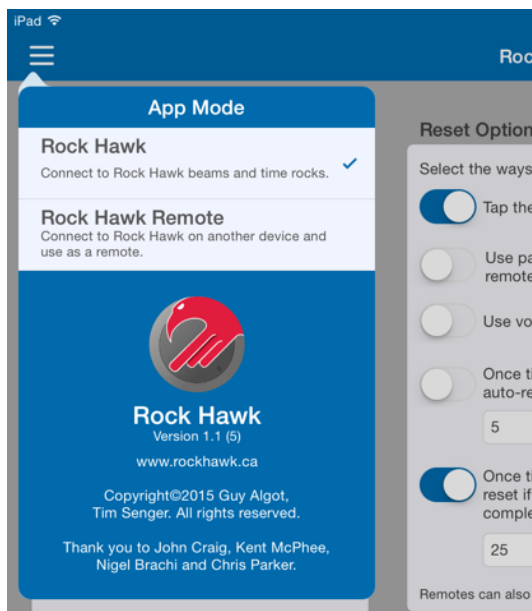
## 14. Connecting Rock Hawk on multiple devices (optional)

Although only a single iOS device is needed to use Rock Hawk, you can optionally connect multiple devices for multiple displays. There are two common uses of this Rock Hawk feature:

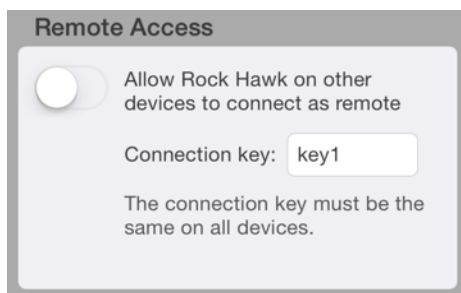
- a. You have two iPads and would like to place both on the sheet, each facing the house of each end. That way you don't have to move a single iPad from end to end when changing rock direction.
- b. When practicing with a skip or coach, he or she can use an iPhone or iPod touch as a secondary handheld display.

Rock Hawk operates in one of two modes: Timer mode and Remote mode. When connecting multiple devices, one device must operate in Timer mode while other devices operate in Remote mode.

To select the mode, tap the menu button at the top-left of the screen.



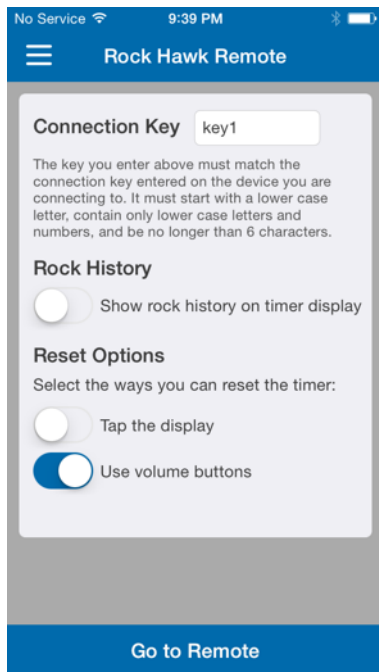
Before you can connect Rock Hawk on two devices, you must enable remote access on the device operating in Timer mode.



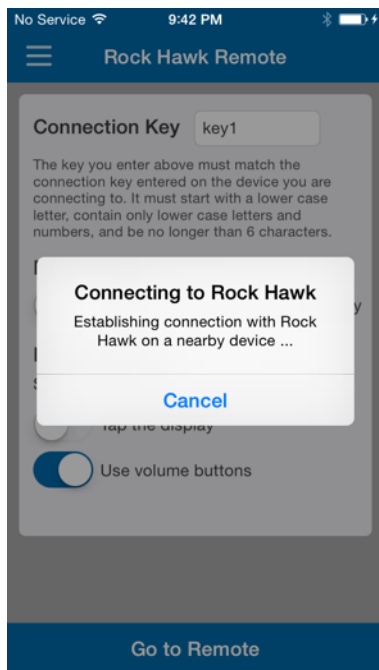
Before turning on the “Allow Rock Hawk on other devices to connect as remote” switch, enter a connection key. The connection key entered here is also entered in Rock Hawk on any device used in Remote mode. By using a connection key, there can be multiple Rock Hawk systems in use at the same club at the same time. Each system would use a different connection key.

After entering a connection key, turn on the “Allow Rock Hawk on other devices to connect as remote” switch. You’ll see an indication of how many other devices are connected.

To connect Rock Hawk on other devices, first select the Rock Hawk Remote app mode on those devices.



Enter the same connection key that you entered on the device on which you're using Rock Hawk in Timer mode. Select options for resetting and showing the rock history, then tap the "Go to Remote" button. Rock Hawk will connect to the other device and then show the timer display.



Note: When connecting for the first time after opening the Rock Hawk app, establishing the connection can take as long as 20-30 seconds.

Once connected, in Remote mode, the Rock Hawk timing display functions the same as Rock Hawk in Timer mode. Tapping the left-pointing button at the top-left of the screen disconnects and returns you to the settings screen.