



MANUAL TAGTIMER

This manual describes the different tests that can be done with TagTimer. It also describes how to connect the system.

For the test results to be reliable, the implementation must be standardized.

Jump tests are based on measuring time in the air. It is required that the test person lands with relatively straight legs. Otherwise, the result will be too high.

Connection and installation

For tests with a jump mat, the mat must be connected to the meter.

For photocell testing, the photocell must be connected to the meter.

Signals from jump mat and photocells work in the same way. This means that the jump mat can be used as a start / stop. The jump mat and photocell can be connected simultaneously to the meter using a splitter for 3.5mm connector.

The system can be expanded with several photocells by connecting a splitter for 3.5mm connector.

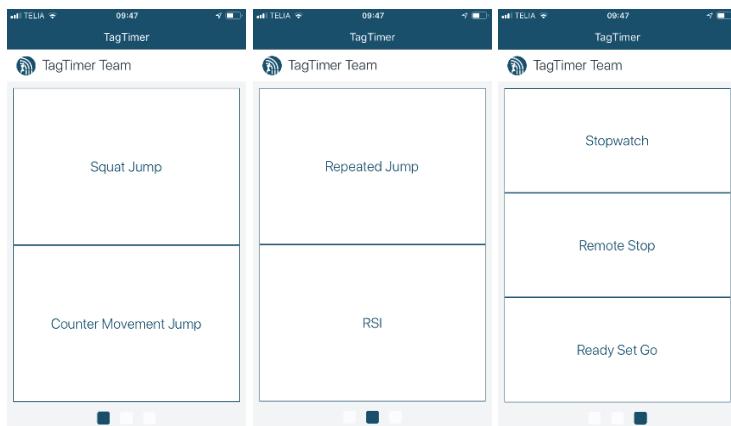
The app is downloaded from the AppStore or play store.

The meter cannot be connected to several telephones / tablets at the same time. Only one connection at a time.

Photocells have an on / off switch. When the power switch is on, a red light should illuminate the photocell. This light goes out when the photocell is pointed at the reflector. If the lamp does not light up, the battery in the photocell is empty.

START PAGE

Switch between the different tests on the front page by "swiping" right or left.



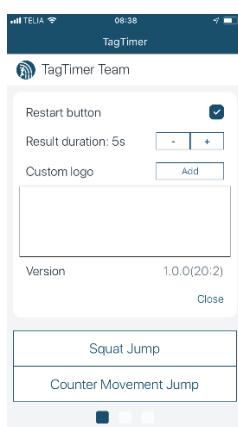
An alternative to swiping is to hold the phone horizontally. By holding the phone horizontally, you will see all the tests at the same time. This also depends on the screen size and type of device.



On the front page, you can access a settings menu. You can find it by holding down a finger on the screen for about 1s. Or click on the gear icon at the top right.



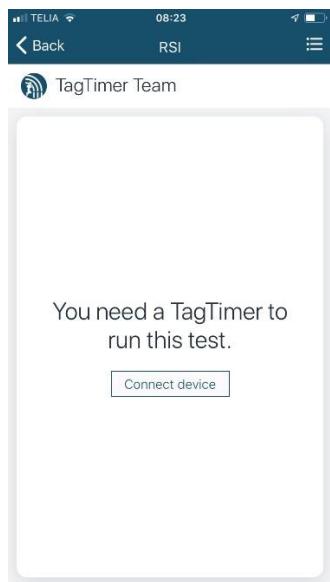
This menu will appear:



You can select whether a button should be displayed to restart the test when results are displayed. How long results should be displayed. And choose a logo that appears on the results page and on the page for measurement.

CONNECT TAGTIMER

Connect the meter by pressing "Connect Device". Bluetooth must be activated.



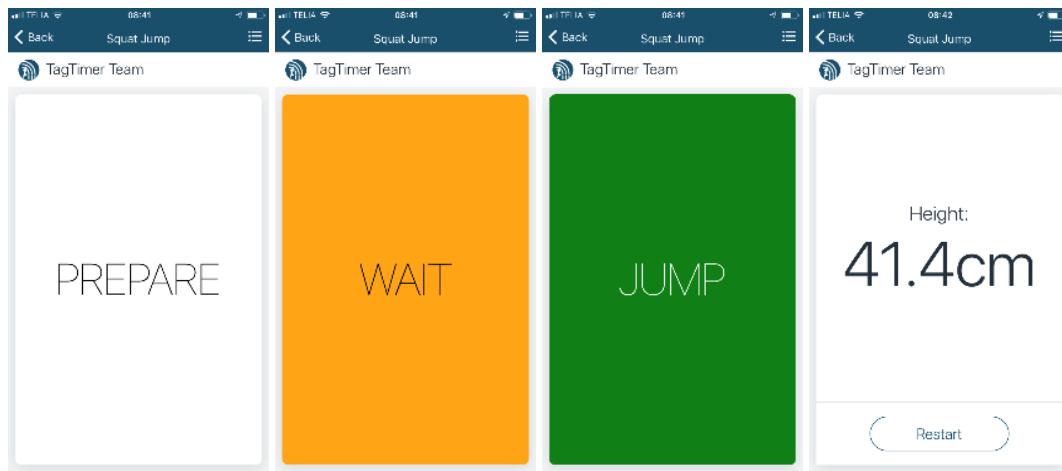
SQUAT JUMP

Result: Jump height

Squat jump measures jumping height. There are no settings for this test. The test person stands on the mat and waits for the app to display a green screen with the text JUMP.

The athlete must not lose contact from the mat before the jump. The contact can be lost if the test person charges downwards so fast that the feet release from the mat. In that case a jump will be registered before the real jump. Normally this is a result of about 1cm in jumping height.

To avoid this, use the Counter Movement Jump feature.



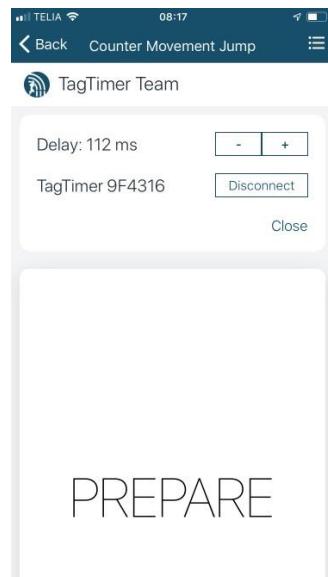
COUNTER MOVEMENT JUMP

COUNTER MOVEMENT JUMP

Result: Jump height

Counter movement works in the same way as Squat Jump. But with a filter time to avoid that a jump is registered when starting the test.

There is a menu that you can access by entering the test. Click on the gear icon. In this menu there is a setting for Delay that can be set between 0 and 240ms. By setting the delay to about 100ms, short shocks to the carpet are filtered out. That is, it will go well to charge with a little hope. The height of the jump is then calculated from the last contact with the mat until landing.

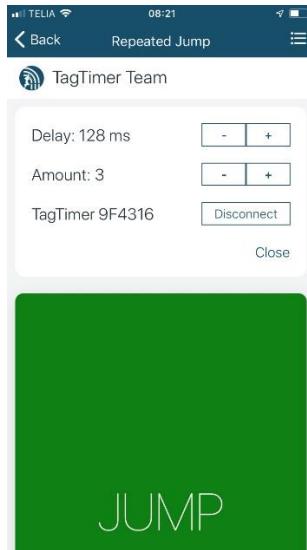


REPEATED JUMP

Result: Jump height and contact time

Repeated Jump has the same setting for delay as Counter Movement Jump, but there is also a setting for number of jumps, Amount. Amount indicates how many jumps you want to make.

You can choose to start off or on the mat. By standing on the mat while PREPARE is displayed, the meter will register that you want to start on the mat. Then the first jump will be counted as height, and the next as contact time. If you start on the side of the carpet, contact time will first be measured, and then height.



RSI

Result: Reactive strength index, average and max

RSI is flight time / contact time. This index can be used to measure readiness. A high jump with a low contact time gives a lower RSI than the same jump height with a lower contact time.

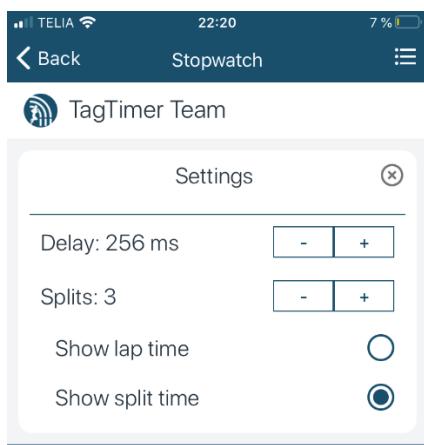
STOPWATCH

Results: Time and intervals

Menu with setting for number of split times and Delay. Delay means that when someone has passed the photocell, it will be switched off for the specified time, eg 512ms. It is used so that a passage does not register more intermediate times.

Timing starts at the first passage on the photocell. The time is stopped when the last split time has passed.

In the menu, you can choose between displaying lap times or split times. That is, either time from the last passage, or time since the first passage.



Remember to use the same height on the stand for each test.



REMOTE STOP

Remote stop starts timing from the app and stops on the first pass on photocell.

Result: Time

Direct Start

Starts timing when the button is pressed.

3 -2 -1 GO

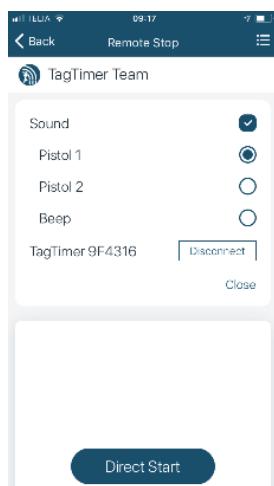
Countdown by 3 2 1 and GO. Timing starts at GO

Reaction

Random start signal between about 5s. Timing starts on GO



Menu for setting the type of audio signal.



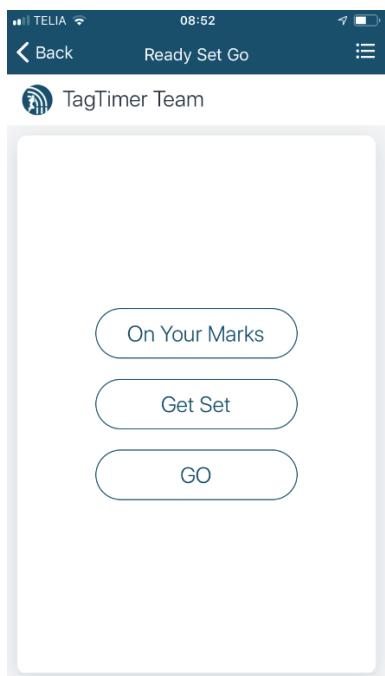
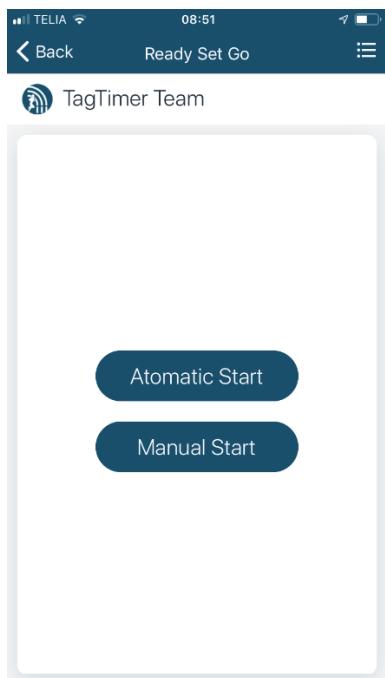
READY SET GO

Result: Time

This test follows the starting sequence for sprinters and is used as starting training for sprinters.

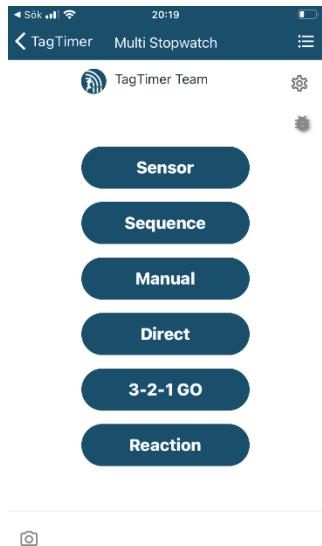
Automatic start runs the sequence automatically.

Manual start has the same steps available as buttons. Timing starts when you press GO.



MULTI STOPWATCH

Multi stopwatch is an advanced timer with display of contact time (time in photocell) and lap or split times. There are a number of different start modes described below.



Sensor start

Starts on the first photocell that is triggered and then continues to record times until the timer is stopped.

Sequence

Timed sequence start for sprinters. Ready, Set, GO.

Manual

Manual sequence start for sprinters where the user selects the steps Ready, Set, GO.

Direct

Direct start with or without sound signal. Timing starts when the user presses GO.

3-2-1 GO

Timed start with countdown before timing starts.

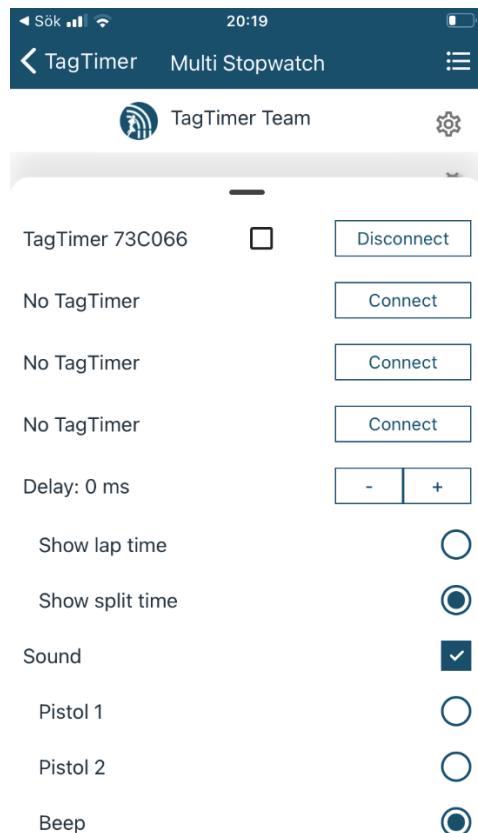
Reaction

Reaction start where timing starts randomly between 3-9 seconds

Connect meter with MULTI STOPWATCH

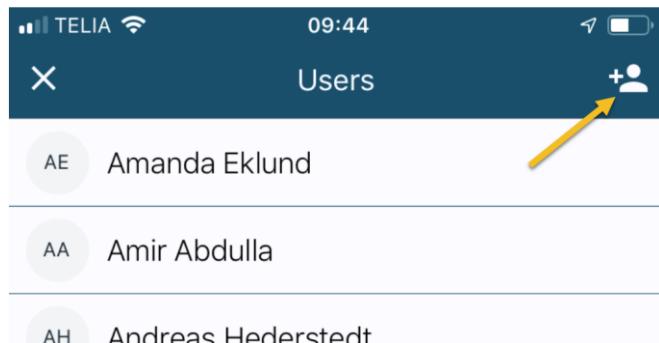
When using MULTI STOPWATCH, several meters can be connected to the same app. These then work in parallel and record times in the same way as if the photocells were connected with a cord. The app registers which meter sent the time.

Up to four meters can be connected.



CREATE USER

Create users by tapping the icon below (yellow arrow).



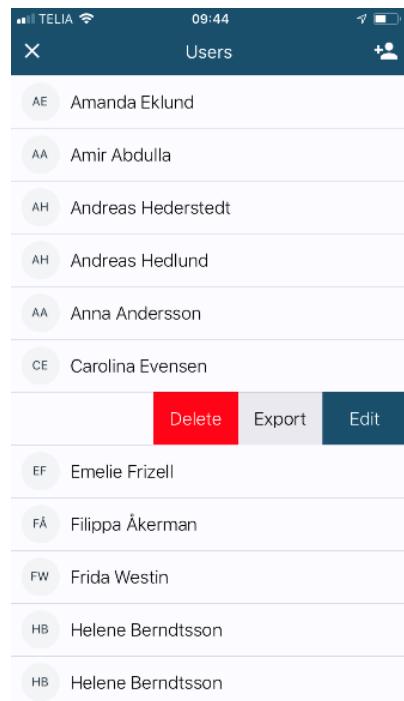
RESULTAT

All tests have a results page. All tests are automatically saved there. Tests can be deleted by swiping left.



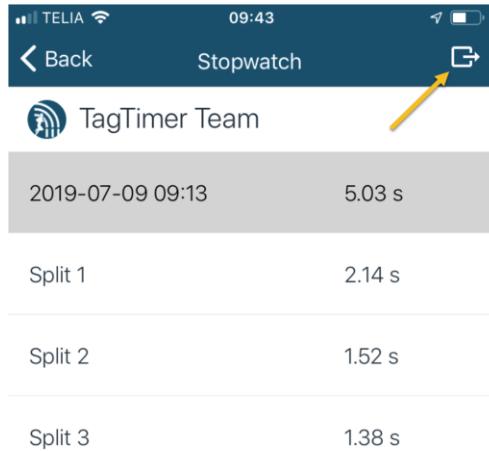
Export results for a user

By dragging the left of a user in the user list, Export is found. This exports all tests performed by the selected user.



Export all user results for a test

The result list has a button (yellow arrow) to export all results for that test. The export format is xlsx and can be opened with excel, or other compatible programs. For example, directly in the iPhone. When exporting, there are options to send the file to mail / sms / dropbox etc.



CONNECTION AND ASSEMBLY

Photocell is connected with a 3.5 mm connector to the meter. For connection of several photocells, splitters are used where two photocells are connected. This can be linked to as many photocells as desired by connecting a splitter to where the next photocell is connected.



The reflex is mounted on a stand with a screw on the stand.



Bracket for photocell is screwed onto the stand with the supplied nut.



Photocell is screwed into the angle with nuts that sit on the photocell. The mount fits on all standard cameras for cameras. The included stand can be raised by folding out legs, and by raising the center pin.



Turn on the photocell, and the red light will come on. When you place the reflector in front of the photocell, the lamp goes out. When passing between the photocell and the reflector, the lamp flashes.



SERVICE

Battery replacement photocell

The photocell has three AAA batteries. These can be replaced by opening the box for the photocell. Screwed with 4 screws.

Loosen the four screws under the drawer to access the battery holder. Some models have a cover for the batteries as in the picture, and are shown to have an open holder under the cover.



Battery replacement meter

The meter has a 3.6V AA lithium battery. For example this:



To open the meter. Fold up the sticker on the lid so that two screws are visible. You do not need to remove the sticker, just fold up a little. The screws are positioned as shown in the illustration.



Unscrew and open the cover to access the battery holder. Then screw back and cover with the sticker again. A battery lasts for a few years in normal use.

Felsökning

No contact with meter

Turn bluetooth on and off

Make sure no other device is connected.

Restart phone / tablet

Try connecting with another phone / tablet.

If none of the above succeeds, the battery in the meter may be exhausted and need to be replaced. However, this is unusual. The battery is normally sufficient for several years.

Photocell does not light up (when it does not point to the reflector)

Check battery in photocell

Photocell lights up when it points to the reflex.

Check that the refex is not too far away.

Check that the photocell does not have direct sunlight on the transmitter or reflector.

Jumpmat does not register hope

Check that the mat is connected to the meter

Check that the carpet is on a level surface.