TENDO Sprint System

*INTELLIGENT, WIRELESS TIMING SYSTEM*

INTRODUCTION

TENDO Sprint System - INTRODUCTION

TENDO Sprint System (TSS) is a wireless computer system used to measure time of short distances in training and testing of athletes. Information provided by TSS is essential in sports where the performance is assessed thought speed, sprint, endurance, reaction, shuttle tests, etc.

TSS is an **intelligent system,** which uses **error correction processing** technology that was found to eliminate false triggers completely. TSS is able to recognise the interruptions of the beam caused by different body parts while **evaluating only the interruption caused by the torso** of the athlete - Making it one of the most accurate systems on the market!

Main Features

1. **Error Correction Processing (ECP)** = uses algorithms to eliminate measurement errors and false signals due to swinging arms or legs.
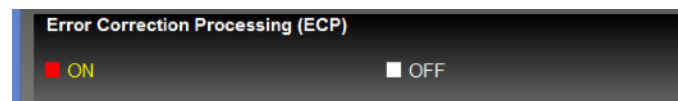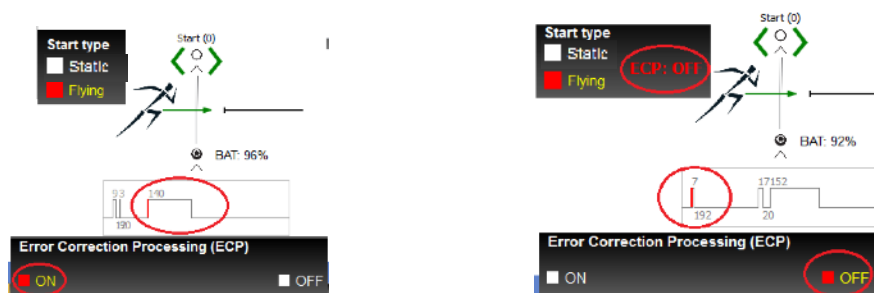

*Turn Error Correction Processing ON/OFF based on your training needs.*

When the Error Correction Processing is turned OFF, the first event is taken into account. Use it in training with athletes using rackets, hockey sticks, wheelchairs…

2. **Start type**

•   **Flying Start** - The system begins to measure when *the first photocell is interrupted.*

•   **Static Start** - The system begins to measure when t*he athlete leaves the first photocell.*
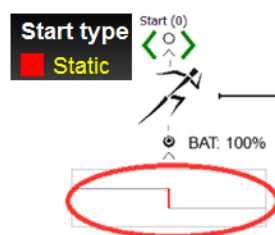
3. Run type

- **Run** - The system uses start and finish photocells (eventually intermittent photocells if connected).
- **Lap Run** - Only one photocell is used (Start = Finish)
- **Shuttle Run** - Run with start and finish photocells, where the finish photocell becomes the start photocell after the finish photocell was crossed (running back and forth).

4. Tempo

If you allow tempo (select "**Allowed**") - the photocells will maintain the selected pace via an audio signal. The pace rate can be selected for each run separately. Speed units are based on unit settings in Admin Center.

Tempo	Run #	1	2	3	4	5
Allowed	Speed [km/h]	15	16	17	16	15

5. Automatic Start Reset - e.g. if an athlete fails the start, it is not necessary to set the new start manually. The system resets the measurement automatically.

for "RUN"

- If the system uses separate Start and Finish photocells, each interruption of the Start photocell resets measurement to new measurement until the Finish photocell or first intermittent photocell (if connected) is activated.

for "LAP RUN"

- If a single photocell is used, which has a double function (Start = Finish), each interruption of the photocell by static start, which is done for longer than 1 second, resets the measurement to a new measurement.
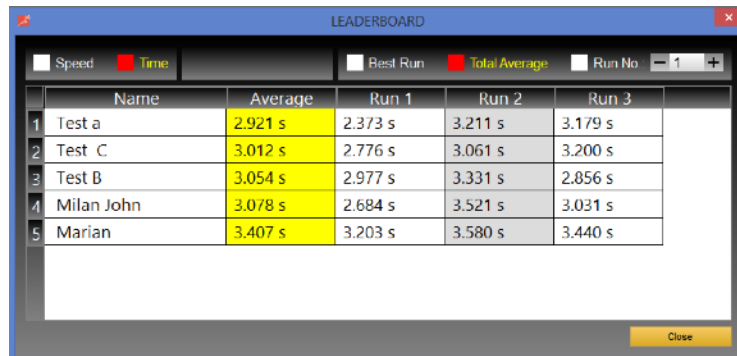
6. Graphic Panel
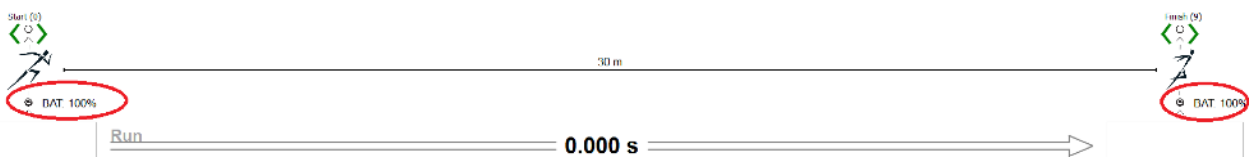
- The graphic panel also displays graphical information about **start and finish** of the measurement with an information about the Error Correction Processing.
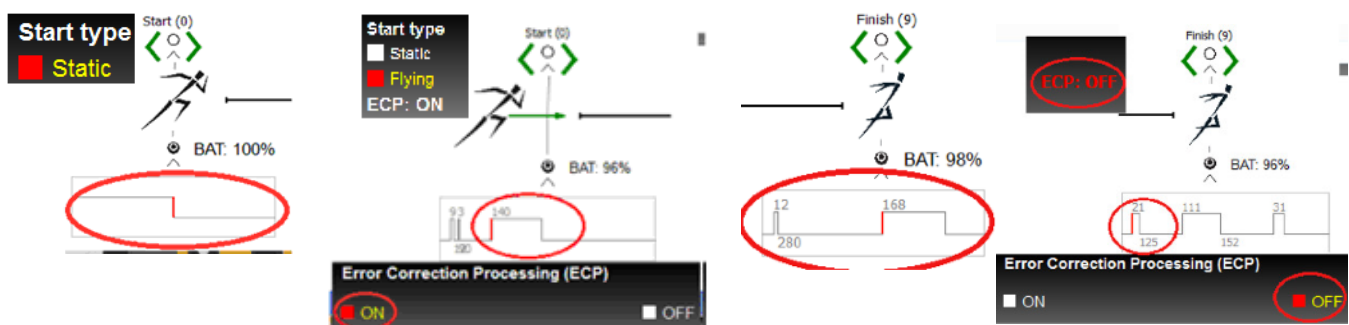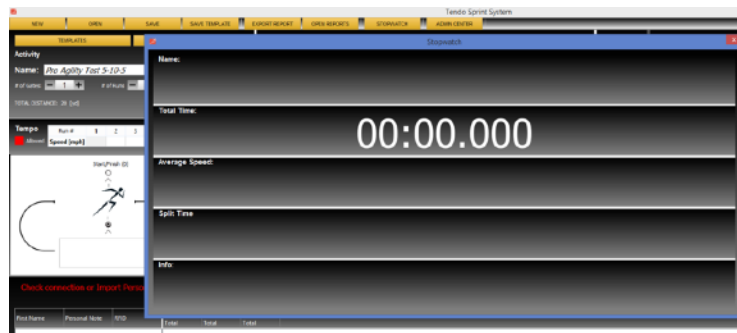
7. **Leaderboard**

It is possible to arrange athletes from the best to the worst according to the best run, total average from all runs or according to selected run number. Choose results for time or average speed.
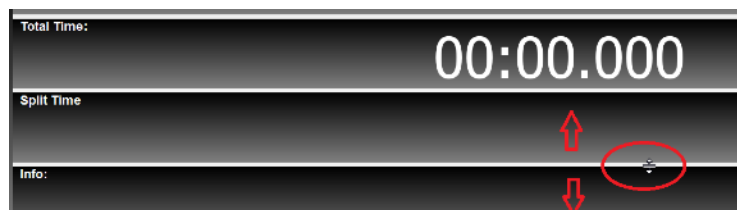

8. **Stopwatch**

The program opens a display window for the measured values for instant feedback.

Each compartment of the display window can be zoomed in/out or stretched.

9. **Rest Time =** Set the length of the rest time between runs.

The Rest Time between runs will be also shown in the table at the bottom of the program window.

If the Rest Time is longer than 1 second, it is possible to select "**Audio Start**", which will signal the start of a new run after the rest time has elapsed.

• If the Rest Time is *within 2-3 seconds* - the **Audio Start** will consist of a *single beep*.
• If the Rest Time is *longer than 4 seconds* - the **Audio Start** will consist of *two short beeps* and *one long beep* each separated by one second.

Audio Start does not trigger the measurement. The measurement is only trigged by interruption of the photocell's beam.

10. **Create Training/Test Templates =** Create your own templates or choose one from our list of pre-programmed training or test templates.

11. **Export Report =** System creates a report in Excel and saves it in the TendoSprintSystem/ export database where all reports are stored.

Content of the basic TSS kit

(1) 2 photocells
(2) 2 reflectors
(3) 1 TSS signal receiver
(4) 5 tripods
(5) 1 manual
(6) 1 computer software installation CD
(7) 1 carrier bag
(8) 2 sets of rechargeable batteries (4 pieces each set)
(9) 2 power adapters
(10) 3 antennas
(11) 1 signal receiver to PC connecting cable