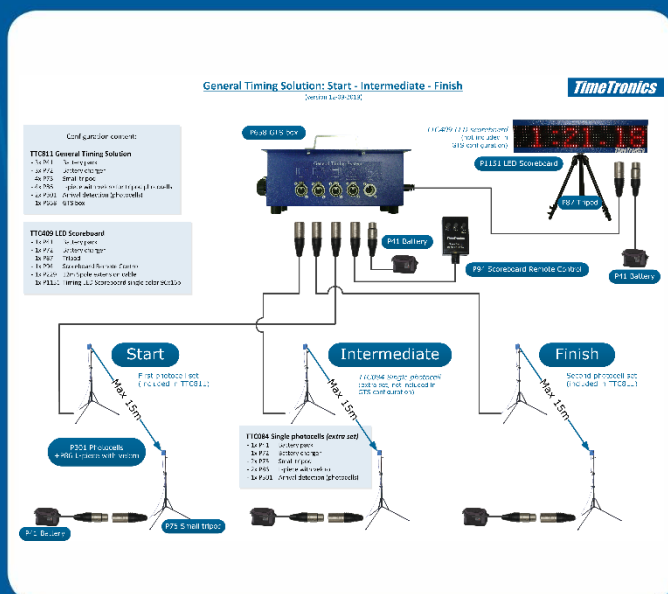


## Manual General Timing Solution



2020v1

SPORT TIMING SYSTEMS



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## Table of contents

<b>1. Introduction .....</b>	<b>4</b>
1.1 How does it work? .....	4
1.2 2 types of configurations .....	5
1.2.1 TTC-810 (scoreboard not included) .....	5
1.2.2 TTC-811 (scoreboard not included) .....	6
<b>2. Setting up of the General Timing Solution .....</b>	<b>6</b>
2.1 TTC-810: photocell principle: reflective .....	6
2.1.1 TTC-810: setup 1 = Start – Intermediate – Finish .....	7
2.1.2 TTC-810: setup 2 = Reset – Start – Finish .....	7
2.2 TTC-811: photocell principle: sender – receiver .....	8
2.2.1 TTC-811: setup 1 = Start – Intermediate – Finish .....	9
2.2.2 TTC-811: Setup 2 = Reset – Start – Finish .....	9



## Manual General Timing Solution

### Welcome to the "General Timing Solution" user manual.

May we recommend you to gently browse through the entire manual first, just to have an initial idea of how the book is structured. As we can't possibly explain all details simultaneously, this might help you a bit in understanding and tracing things back. Of course, the table of contents will also help you in doing so.

Please note that all pictures are examples, the delivered version can be different than shown in this manual please inform yourself before purchase.

If you, after reading this document, have any further question regarding the operation or service of this or any other TimeTronics equipment, please contact your local distributor or TimeTronics directly, by email: [info@timetronics.be](mailto:info@timetronics.be), or call us at +32 (0) 14 23 19 11.

Please also contact us if you have any remarks or advice regarding this user manual: [info@timetronics.be](mailto:info@timetronics.be)

Good luck and thank you for your confidence in the TimeTronics products and services.

The editors

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## 1. Introduction

### 1.1 How does it work?

Each version of the TimeTronics electromagnetic numeric timing scoreboards can display any numbers that are serially send to it by a personal computer (= "display function"), but they also have 3 digital inputs which allows the internal software to time events (= "timing function"). TimeTronics delivers with each such scoreboard a small black box with three (3) buttons, to allow anybody to give "Start", "Stop" and "Lap/Reset" signals to the scoreboard. This black box is called "Scoreboard Remote Control" box, see picture below.



TTC-409: LED Timing Scoreboards



TTP-94 Scoreboard remote control

The GTS configuration contains the necessary parts (GTS box, extra battery(s), tripods and photocell(s)) to allow the scoreboard to automatically time a runner (or other moving objects) when he/she is passing a start and/or stop photocell barrier. With the latest version of the GTS box, it is even possible to record a "split" time, by using an (optional) third photocell barrier. The principle is that you will plug the cable of the GTS box into the scoreboard, and this way replace the push button signals by the electronic signals of the GTS box (signals that coming from the photocells).



TTP-658: General Timing Solution box

**HOWEVER:**

You stay always in control of the scoreboard, by means of the "Scoreboard Remote Control" box, that you also plug into the GTS box. In other words; the scoreboard will receive the signals from the photocells, but ALSO from the "Scoreboard Remote Control" box. You will see that the scoreboard will:

- Start if you press the "Start" button, or interrupt the "Start" photocell barrier.
- Stop if you press the "Stop" button, or interrupt the "Stop" photocell barrier.
- Record a SPLIT time or will Reset if you press the "Lap/Reset" button, or interrupt the (optional) "Lap/Reset" photocell.

## 1.2 2 types of configurations

There are 2 types of configurations for the General Timing Solution:

- TTC810 = using 2 sets of "reflector type" of photocells, optical range = 2,5 meter
- TTC811 = using 2 sets of "Transmitter + Receiver type" of photocells, optical range = 15 meter

The main difference is the longer range of the photocells, but for this purpose these photocells need an extra battery for each photocell transmitter. The timing operation of the 2 configurations is the same.

### 1.2.1 TTC-810 (scoreboard not included)

- 1x Battery pack: to be plugged into the GTS box, to power the photocells.
- 1x Battery charger
- 2x tripod for the photocells
- 2x L-piece for the photocells
- 1x GTS box: cable of the box is 9m
- 2x reflective photocell optical range max 2,5m): cable of the photocells is 20m
- **optional:**
  - intermediate or reset:
    - 1x reflective photocell with reflectors (optical range max 2,5m): cable of the photocells is 20m
    - 1x tripod for the photocells
    - 1x L-piece for the photocells
  - extra reels to extend the cable of the photocells (max. 500m)

### 1.2.2 TTC-811 (scoreboard not included)

- 3x Battery pack: 1 battery for the GTS box and the photocell receiver(s) + 1 for each photocell transmitter.
- 3x Battery charger
- 4x tripod for the photocells
- 4x L-piece for the photocells
- 1x GTS box: cable of the box is 9m
- 2 pairs of photocells (range max 15m): cable of the photocell receivers is 20m
- **optional:**
  - intermediate or reset:
    - 1pairs of photocells (range max 15m): cable of the photocell receivers is 20m
    - 2x tripod for the photocells
    - 2x L-piece for the photocells
  - Extra reels to extend the cable of the photocells (max. 500m)

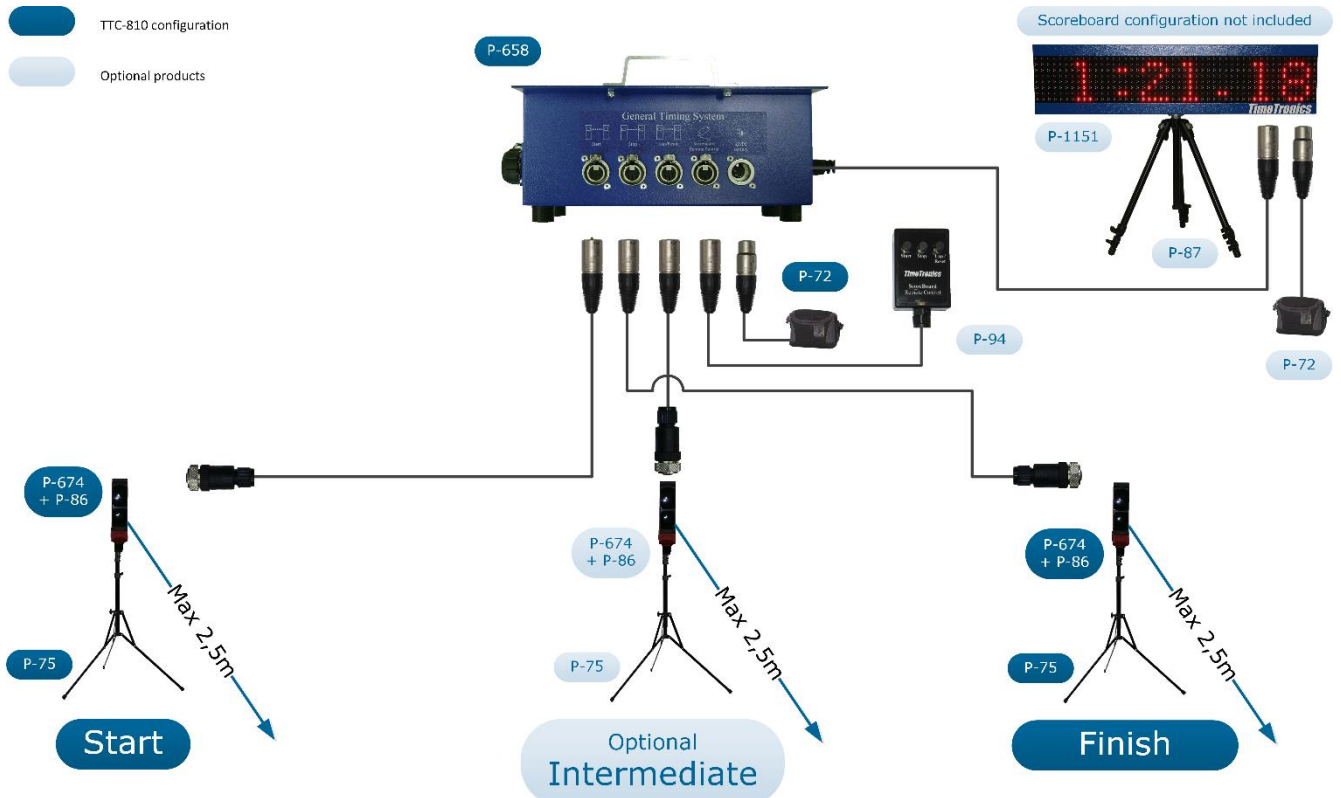
## 2. Setting up of the General Timing Solution

### 2.1 **TTC-810: photocell principle: reflective**

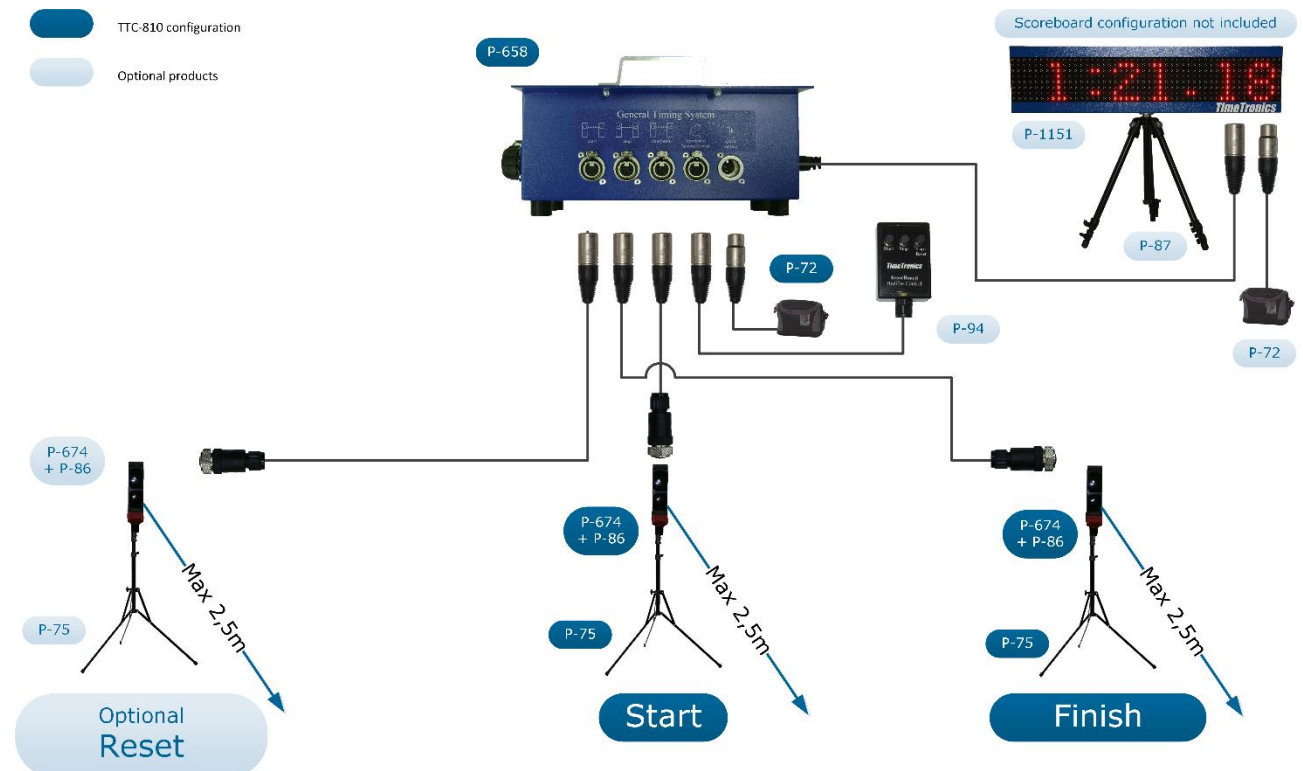
The General Timing Solution Control Box has 5 connectors on the box + one cable of 9m with male connector.

1. Plug the "Scoreboard Remote Control" box in the connector "Scoreboard Remote Control".
2. Plug a first photocell in the "Start" connector. You can fix your photocell easily with Velcro strips on the L-shaped metal plate, which can be screwed on top of the included tripods. Of course, they can also be fixed more permanently by means of the screws. You can also fix the reflectors with Velcro strips on the L-pieces. Put the tripods at a suitable height (for your training/sport/test), but make sure that the photocell AND the reflector are at exactly the same height above the ground level. Already try to point the photocell as good as possible in the direction of the reflector.
3. Plug a second photocell in the "Stop" connector. Attach also this second photocell and the corresponding reflector on the tripods, by means of the Velcro straps.
4. Plug the battery in the "12VDC Battery" connector.
5. The cable on the side of the box should be connected directly to the scoreboard in the connector "Scoreboard Remote Control" or can be extended by a scoreboard cable (12m 5p extension cable: P229).

### 2.1.1 TTC-810: setup 1 = Start – Intermediate – Finish



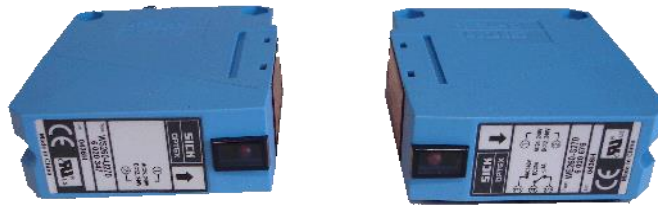
### 2.1.2 TTC-810: setup 2 = Reset – Start – Finish



## 2.2 TTC-811: photocell principle: sender – receiver

1. Plug the "Scoreboard Remote Control" in the connector "Scoreboard Remote Control".
2. Plug a first photocell receiver in the "Start" connector. You can fix your photocells easily with Velcro strips on the L-pieces, which can be screwed on top of the included tripods. Of course, they can also be fixed more permanently by means of the screws. The photocell transmitter should be connected to a battery pack, to receive power.
3. Plug a second photocell receiver in the "Stop" connector. The photocell transmitter should be connected to a battery pack, to receive power.

You can identify the transmitter and receiver part of the photocells by the following:



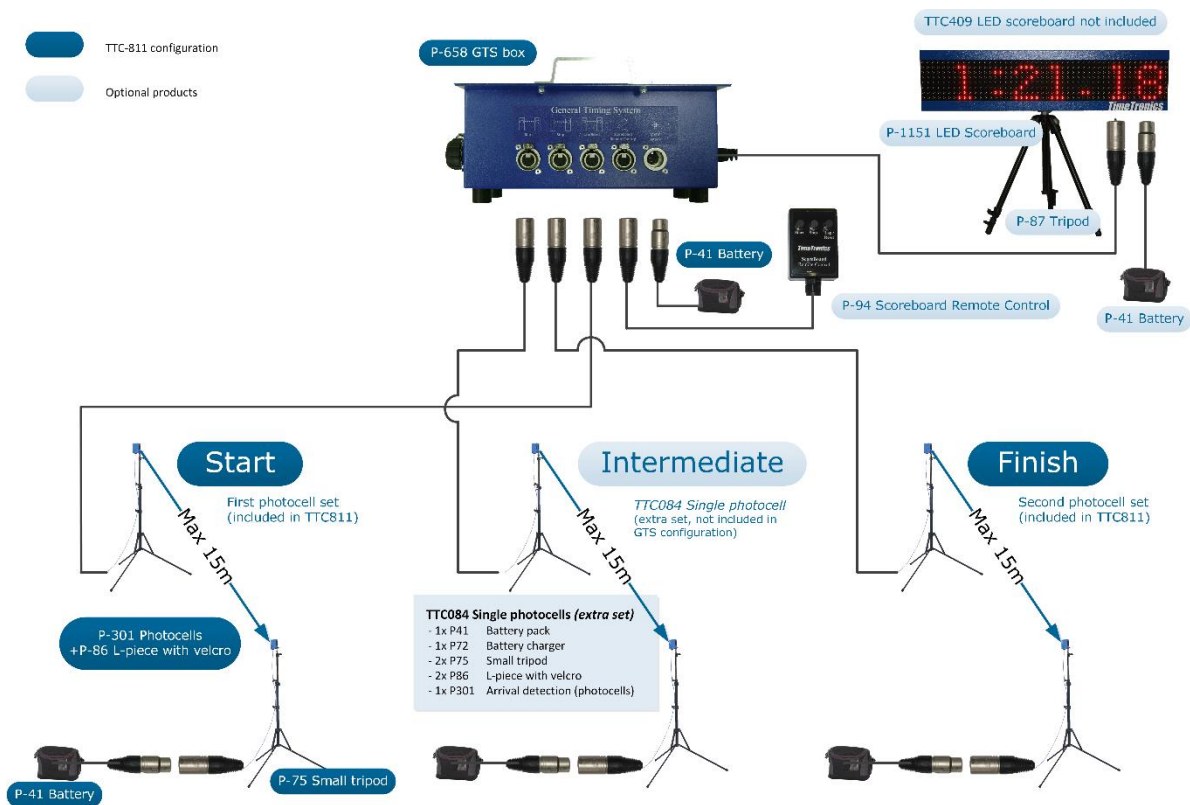
On the photocell transmitter (left) you see an arrow (à) pointing AWAY from the photocell.

On the photocell receiver (right) you see an arrow (->) pointing TO the photocell.

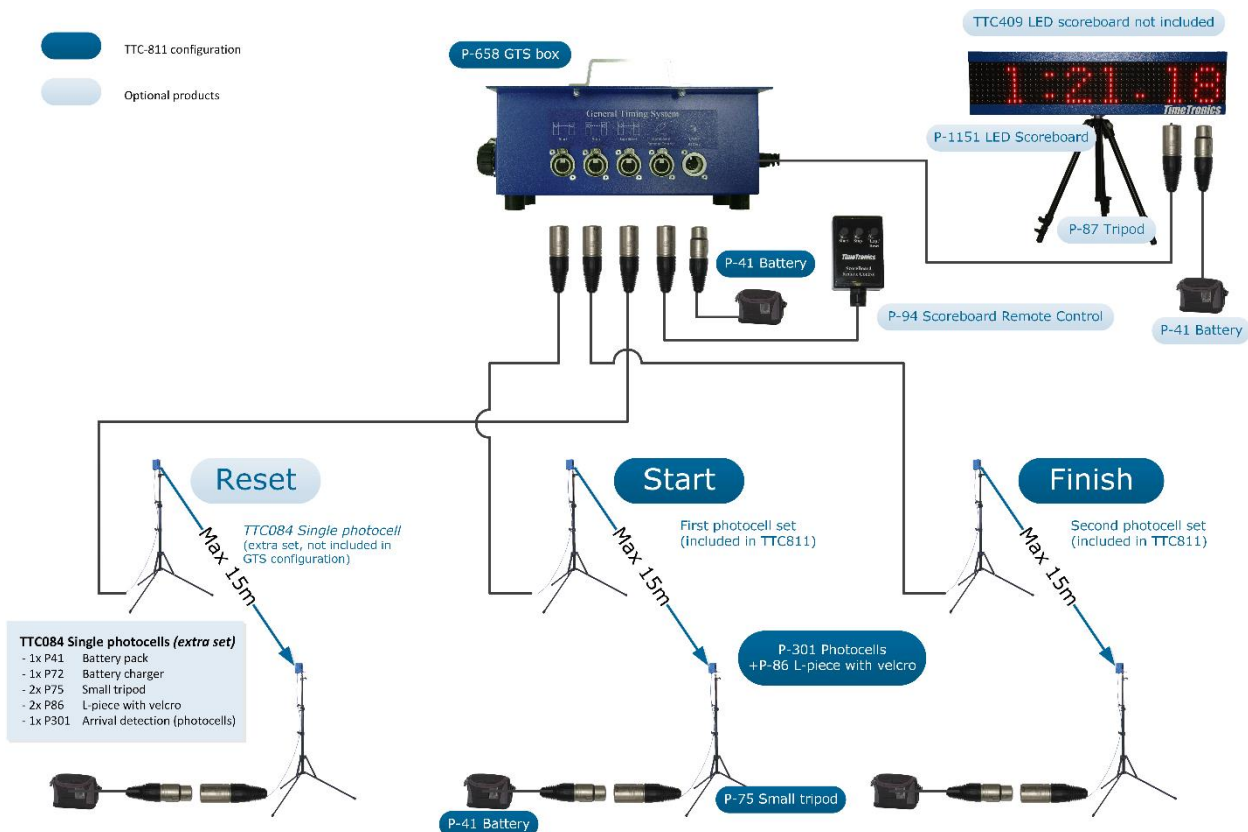
4. Plug the remaining battery in the "12VDC Battery" connector of the GTS box.
5. The cable on the side of the GTS box should be connected directly to the scoreboard in the connector "Scoreboard Remote Control" or can be extended by a scoreboard cable (12m 5p extension cable):



### 2.2.1 TTC-811: setup 1 = Start – Intermediate – Finish



### 2.2.2 TTC-811: Setup 2 = Reset – Start – Finish



Good Luck with your operation and use of this General Timing Solution

If you have whatever question or advise to us concerning this user manual.

Please contact us by email on [support@timetronics.be](mailto:support@timetronics.be)

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