

GPS LIGHT BARRIER SYSTEM – TRAINING

GPS-synchronised timing. Wireless. Automatic. Unlimited time memory.



1 μ s

resolution of time capture in the timing module

20 m

maximum distance between light barrier and counterpart

150 m

radio radius around the central module, timing area max. 300 m diameter

6

timing modules can be operated with one central module

64

times buffered in the central module, unlimited in the app

How a time is created

01 Measure

The light barrier or hose triggers. The timing module records the moment with its GPS-synchronised clock.

02 Collect

The central module receives the times from up to six timing modules by radio and confirms each one individually.

03 Evaluate

Via Bluetooth, the times go to the "DST – Training" app: live, with split times and target-time comparison.

The modules

All modules are preconfigured on delivery.



■ TIMING MODULE · YELLOW Light barrier module

Light barrier with counterpart, max. 20 m apart. An alignment mode with beep helps with setup.



■ TIMING MODULE · YELLOW Pressure hose module

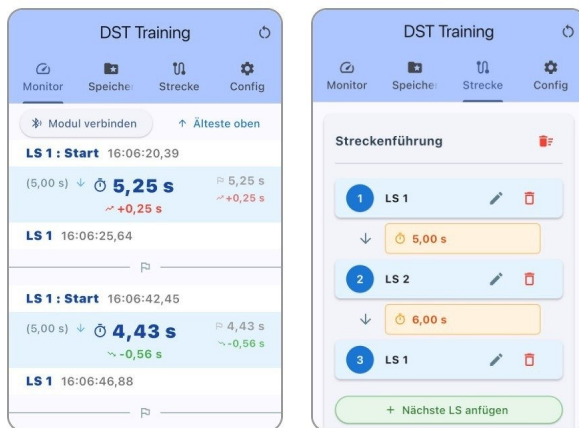
Same time capture, triggered by a hose laid across the course.



■ CENTRAL UNIT · RED Central module

Receives the times of all timing modules by radio and forwards them via Bluetooth to the app.

DST – Training app



Monitor: every trigger live with time of day

Target times: split time with deviation

Course: freely define the order of the light barriers



Transport: modules in a case with foam insert, tripods in the carry bag.

Technical data

Time base	GNSS/PPS-synchronised clock in every timing module
Time resolution	1 µs, hardware capture *
Light barrier	Distance max. 20 m
Radio range	max. 150 m radius around the central module, i.e. max. 300 m diameter
Timing modules	max. 6 per central module
Radio	WiFi to the central module (channels 1-13), Bluetooth Low Energy to the app
Transmission	acknowledged, with retries; buffer: 5 times (timing module), 64 (central module)
Parallel operation	Group ID 1-255 separates several systems at the same location
Interference filter	Minimum trigger duration 0-5000 ms, lockout after triggering 0-10000 ms
Operation	OLED display, rotary switch, beep
Power supply	Battery, charging via USB-C

* Resolution of the digital capture. The achievable accuracy of the overall system depends on GPS reception, light barrier and setup, among other things. Timing modules need a clear view of the sky.

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