Coastal Rowing Timing System

System Description and
Quick Start Guide

Beach Sprint | Timing | Start Signals | Finish Buttons



IMAS Sportsystems

Coastal Rowing Beach Sprint

1. System overview

Main components supplied with the Coastal Rowing timing system.



Timing and control

CoastalRowingTimer in rugged case,
12 V power supply and external hand controller.

Start signalling

Two red/green signal lights, horn speakers and dedicated signal/horn cables.

Finish detection

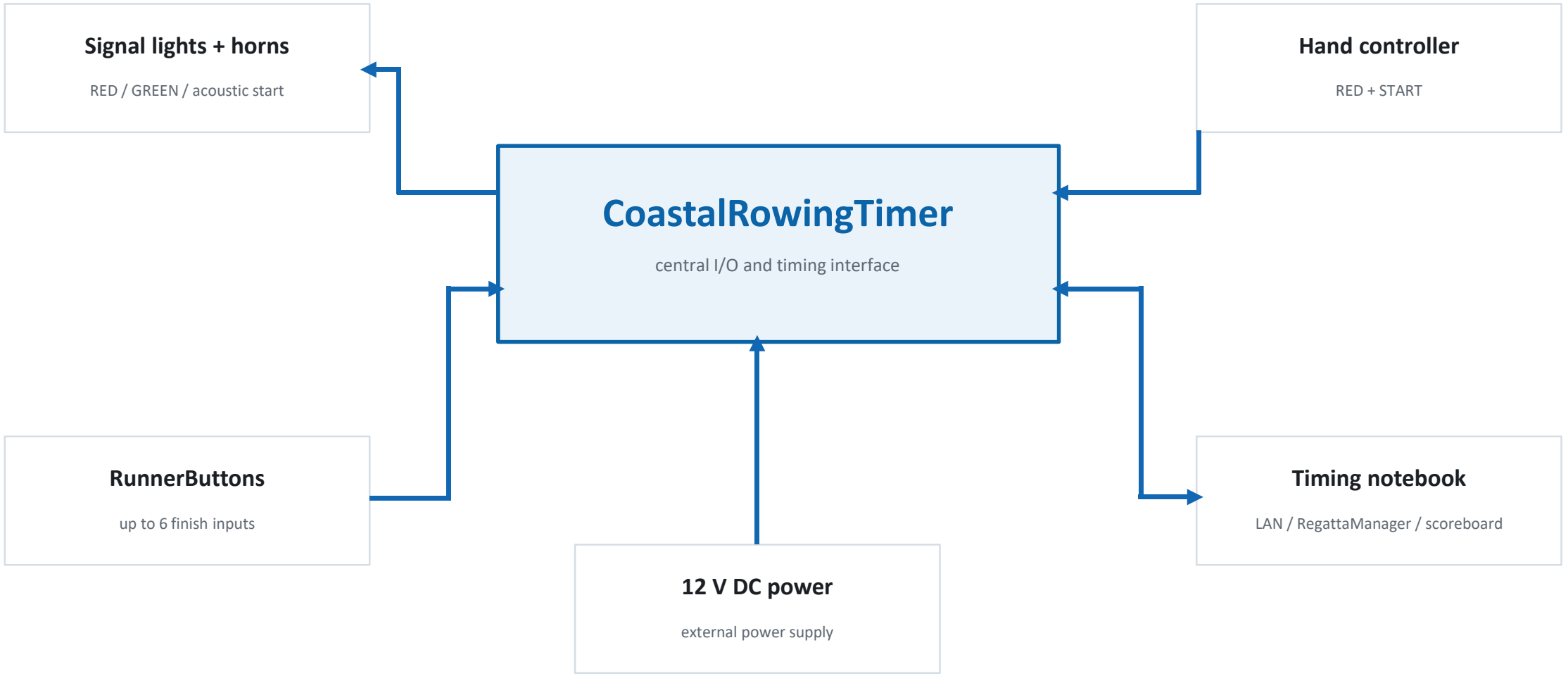
Vandal-resistant RunnerButtons with fixed 15 m cables and RJ45 connectors.

Host system

IMAS timing notebook with full RegattaManager integration, timing and scoreboard.

2. System architecture

The CoastalRowingTimer is the central interface between operator, signalling, finish buttons and timing notebook.



The PC controls the procedure.
The CoastalRowingTimer keeps the timing-critical START action synchronized.

3. CoastalRowingTimer - local controls

Redundant controls are integrated directly into the case in addition to the external starter hand controller.



RED / Attention

Manual control for the red signal light.
The same function is available on the external hand controller.

START / Green

Triggers the synchronized start:
RED off, GREEN on, horn and start event to the timing system.

Green timeout

GREEN switches off automatically after a configurable time.
Current default: 5 seconds.

4. CoastalRowingTimer - main connector panel

Connector panel used during normal setup.



Signal lights / horn

Round connector to the first signal-light unit. Further lights are daisy-chained.

RunnerButtons 1-6

Six red RJ45 inputs for runner-operated or judge-operated finish buttons.

Starter control

Round connector for the external hand controller with RED and START buttons.

LAN to host

Ethernet connection to the IMAS timing notebook / host computer.

5. CoastalRowingTimer - power and auxiliary START output

The system uses a dedicated 12 V supply.



12 V DC input

Round metal connector from the dedicated external power supply.

Potential-free START contact

Two blue banana sockets provide a potential-free normally-open contact.
It closes for approximately 1 second on every START.

Signal-light connector

Connection to the first signal-light / horn unit.

6. CoastalRowingTimer - host side and microphone

Additional connections on the opposite side of the case.



Starter control

External RED / START hand controller.

LAN host connection

Connection to the timing notebook. Timing actions, results and race statuses are synchronized with RegattaManager.

6.35 mm microphone input

Additional microphone jack for announcements / PA use where required by the event setup.

7. Signal lights and horn speakers

Each signal-light unit provides RED and GREEN light. The horn speaker can be mounted on the same support.



- RED is activated before the start / Attention phase.
- At START:
  RED switches off,
  GREEN switches on and the horn sounds synchronously.
- GREEN turns off automatically after the configured time (default: 5 s).
- Horn and signal light may be mounted together or positioned separately.
- Signal lights are connected in daisy-chain.

8. Signal-light connections

Three connectors enable a simple daisy-chain installation.



INPUT - male

From the CoastalRowingTimer or from the previous signal-light unit.

LOUDSPEAKER - female

To the horn speaker assigned to this signal-light unit.

OUTPUT - female

To the next signal-light unit in the daisy-chain.

Four signal lights have already been tested successfully.
Additional units are possible subject to the available 12 V power budget.

9. RunnerButton - finish detection

Vandal-resistant runner-operated finish button with fixed 15 m cable.



- Large red mechanical push button for easy operation on the beach.
- Permanently attached 15 m cable - fewer detachable parts at the button itself.
- RJ45 connector plugs into one of the six RunnerButton inputs.
- Every press is recorded with time, race context and button number.
- Automatic crew assignment may be used where button/lane mapping is unambiguous.
- With automatic assignment disabled, button events can be assigned manually to the correct crew.

10. Starter hand controller

Remote manual control for the start area.



RED

Activates / deactivates the RED signal light for the “Attention” phase.

START (green button)

Triggers the official START action.
The CoastalRowingTimer synchronizes:
RED off, GREEN on, horn and timing start.

Metal connector

Connects to the dedicated starter-control socket on the CoastalRowingTimer.

11. Timing notebook and RegattaManager

The supplied notebook runs the full RegattaManager version integrated with timing and scoreboard.



- Start-List changes in RegattaManager are synchronized with timing and scoreboard.
- Timing actions and recorded results are available directly in RegattaManager.
- DNS, DNF, DSQ and other status changes are synchronized in both directions.
- Penalties can be entered before or after the finish. Scoreboard and ranking update automatically.
- Qualification can be applied automatically when a race is marked as “Official”.
- The Lite RegattaManager can be used separately for training and event preparation.
  Prepared regattas can later be imported.

Lite download: https://lite.imas-sport.com/

12. 12 V power supply

Dedicated external power supply for the CoastalRowingTimer and connected start-signalling hardware.



Mains side

Standard AC mains cable connects to the power supply.

12 V output

The round metal connector plugs into the 12 V input on the CoastalRowingTimer and is secured by the locking collar.

Power concept

Dedicated 12 V power is used to drive at least 4 lights (red / green).

13. Quick setup - recommended order

Suggested first commissioning sequence at the venue.

1 Place hardware

Position timer, signal lights, horns and finish buttons.

2 Connect signalling

Timer -> first signal light -> horn -> next signal light.

3 Connect finish buttons

Plug RunnerButtons / judge buttons into inputs 1-6.

4 Connect starter control

Connect the external RED / START hand controller.

5 Connect notebook

LAN cable from CoastalRowingTimer to the timing notebook.

6 Connect 12 V power

Attach the locking 12 V connector and then mains power.

7 Start software

Open IMAS RegattaServer and IMAS RegattaManager and verify communication.

8 Functional test

Test RED, START, horn, GREEN timeout and every finish input.

14. Race operating workflow

Typical sequence from preparation to official result.



Penalties may be entered after the race has started - before or after the finish.
The scoreboard updates automatically and qualification ranking uses the adjusted result.

15. Training, updates and future extensions

Software / firmware updates can be installed without shipping the system back to Germany.

Online training

Remote training can be performed using the supplied notebook.
Remote support is possible when internet access is available.

Certificate of Training

After completing the training, a Certificate of Training can be issued for trained operators.

Software / firmware updates

Updates can be delivered via internet and installed on the supplied laptop / device when required.

Automatic start sequence

A future separate application can automate countdown announcements and use network commands to control the lights and Start-Signal

Additional signal lights

The daisy-chain concept allows further signal-light units, subject to the available 12 V power budget.

Synchronized clock

A separate clock can be synchronized automatically with the timing system and display current hours / minutes.

Before the first competition: perform a complete simulated regatta and verify every button, cable, signal light, horn and software workflow.

16. Transport and storage

The complete Coastal Rowing timing system can be packed into one aluminium transport case.

Everything in one case

Compact, flexible and transportable for shipping, storage and event operation.

38 × 38 × 58 cm
external dimensions

22 kg
packed weight

Aluminium transport case for the complete supplied system.

