

LEFOUR

LEA ŠPORTNI SEMAFORJI

A background image of a soccer goal net. Overlaid on the net is a scoreboard with the following text:

PERIODA	BONUS		
		4	
		5	
		6	
		7	
		8	
		9	
TIME OUT		10	
		11	
GOSTI		12	
		13	
		14	
		15	

SPORTS SCOREBOARDS

2014

LEFOUR d.o.o. continues its tradition of offering the highly successful sports scoreboards by SWARCO LEA d.o.o., which received the highly renowned Gazela award for its growth and innovation efforts. During its history of operations, the company has equipped more than 300 gyms with the sports scoreboards. In 2011, the sports scoreboards programme was split from the production of traffic signs creating a new company - LEFOUR d.o.o. with its head office in Lesce.

With the wish for the newly established company to successfully continue its work in the field of development and innovation, we aim to make it a recognisable brand in the world of sports under a new name. Our company lacks no fresh energy, knowledge and the drive to succeed. We listened to the most demanding of clients and are able to adapt to their needs and requirements.

We take pride in that all our products are made in Slovenia using basic raw materials that are primarily of European origin.

The vision of LEFOUR d.o.o. is to develop and upgrade existing products and to provide high-quality craftsmanship and support to our clients. Our products offer the option for system upgrades and can be adapted to new sports rules.

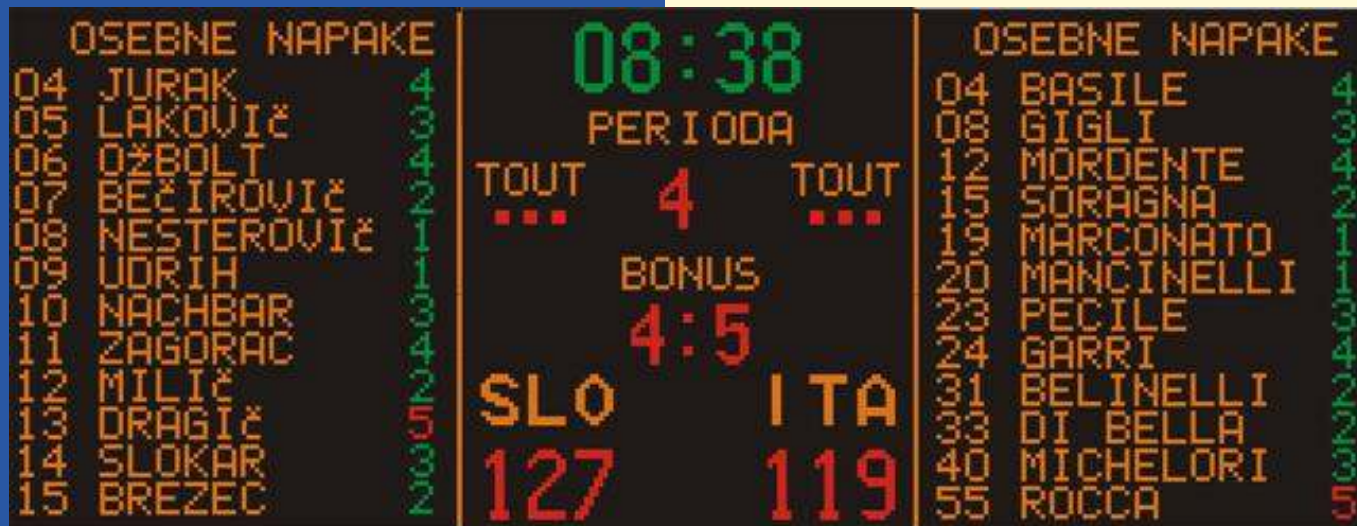
A major share of the products we manufacture is built based on client templates and in accordance with their requirements. Our clients have the option to take part in the entire process by specifying their requirements, on the basis of which we design, develop and manufacture a product that meets their needs perfectly.





# SPORTS SCOREBOARD **GRAPHICS**

A multipurpose universal sports scoreboard. Suitable for use in large sports halls. Its modular design enables creation and visual representation of individual sports. Optionally display advertisements and text messages.



The scoreboard features a modular design, as follows:

**The main display** – the graphics sports scoreboard is comprised of individual modules that may be used independently. In more complex competitions where the scoreboards must adhere to the rules of individual sports associations, scoreboards that are comprised of multiple modules are the suitable solution.

**Control unit** – the display is controlled through a dedicated keyboard or a PC via wireless or wired communications. The software makes it possible to keep scores for the following sports: basketball, handball, volleyball, futsal and hockey.

**The application** contains all the game rules and logic. The design is modular making it possible to add individual sports and parametric, which enables simple adjustments to any changes in the game rules. The scoreboard is controlled through a dedicated keyboard or a standard PC keyboard. The application records all game events in a file. This makes it possible to review past games and to restore the state of the game in case of power loss. The application also enables triggering of pre-defined graphics effects, advertisements and animations.

- Example of a graphics scoreboard



## Technical specifications:

- Resolution: 96 x 112 pixels (10752 pixels)
- Net dimensions: 1920 x 2240mm
- The distance between light points: 20mm
- LED colour: red, green
- Viewing angle: 160°
- Visibility: min 90m
- Power supply: 230V/AC, 50Hz
- The graphics display supports a maximum of 256 colours
- Independent operation (displaying of pre-defined content)
- Displaying of text, graphics and animation content
- M.T.B.F: 120000h

## Content management:

- Through a PC or an additional dedicated keyboard for better convenience
- LEA MULTISPORT application software (OS platform: Windows.net)
- Communications: wireless, Ethernet, RS-485
- Compatible with the existing LEA and LEFOUR sports programme scoreboards.

# SPORT SCOREBOARD **SPS27**

Can be used in big and middle size sport halls.

Height of numbers is 27 cm which enables clear displaying of results and time at a distance of 120 m.

Displays are made of long-life LED diodes (over 10 years) which ensure low use of electric power.

By taking suitable modules, scoreboard can be used for basketball, handball, volleyball, etc.



Scoreboard is made modular and consists of:

**Main board** - shows time of game (minutes, seconds, hundreds of second in last minute), results (0-199), match period or results in sets (0 to 9), serve/bonus and time-out; dimensions 180 x180 x10 cm; with alarm and commanding unit with LCD display

**Action time display** - shows time of action and time out (60 sec.) and time of game (displays height 10 cm); dimensions 52 x35 x10 cm

**Faults display** - 5 faults for 2 x 12 players (6 faults optional); and sum of team faults (height of numbers 21cm); dimensions 70 x180 x10 cm

**Penalty display** - shows numbers of three players and time left till the end of penalties (height of numbers 21cm); dimensions 70 x180 x10 cm

## Technical characteristics:

- power supply 230 V, 50Hz - mobility of all parts of scoreboard
- max. power consumption 300 W - simple and quick installing
- accuracy of clock +/- 0.02 sec/h - simple manipulation
- microprocessor added operating enables simple changing of programme in case of changes in game rules

## Options:

- Statistic display
- scrolling text faults display with personal numbers 0 - 99
- security net for scoreboard

# SPORT SCOREBOARD **SPS27**

## Additional with statistics SPS27-STAT

Can be used in big and middle size sport halls.

Height of numbers is 27 cm and enables clear display of results and time at a distance of 120 m.

Displays are made of long-lived LED diodes (over 10 years) which ensure low use of electric power.



METI NA KOŠ		20:00		METI NA KOŠ	
MALI G.	4	PERIODA		ŠTOPAR U.	2
BAŽDAR	5	2		RUTENKA	3
BOISA V.	7	TIME OUT		VUGRINEC	4
MIHALIČ	8	◆◆◆		OŠTIR M.	7
JERŠIN	9	SET		BILBIJA	13
ŠTELMAH.	10	0:3		BAJRAM D.	14
MARAVIČ	13	BONUS		KOZLIA M.	15
ŠMIGIČ	14	DOMAČI		GORENŠEK	18
ZAGORAC	21	LE4		ŠTRUC K.	19
PETROV	22	SERVIS		NATEK J.	21
PAVIČ S.	30	BONUS		BRUMEN	22
OŽBOLT	31	126 <> 139		KOKCHAROV	23

Scoreboard is made modular and consists of:

**Main board** - shows time of game (minutes, seconds, hundreds of second in last minute), results (0-199), match period or results in sets (0 to 9), serve/bonus and time-out; dimensions 180 x 180 x 10 cm; with alarm and commanding unit

**Statistic modul** - shows player name and number, statistics of jumps, scores, basket scores ect., (displays height 10 cm); dimensions 100 x 180 x 10 cm

### Technical characteristics:

- power supply 230 V, 50Hz - mobility of all parts of scoreboard
- max. power consumption 300 W
- simple and quick installing
- accuracy of clock +/- 0.02 sec/h
- simple manipulation
- casing:
- microprocessor added operating enables simple changing of programme in case of changes in game rules

### Options :

- scrolling text
- faults display with personal numbers 0 - 99



# SPORT SCOREBOARD **SPS27**

Additional can present personal numbers with faults SPS27-OSN-PN

Is suitable for use in big and middle size sport halls

Height of numbers is 27 cm, which enables clear displaying of results and time at a distance of 120 m.

Displays are made of long-life LED diodes (over 10 years) which ensure low use of electric power.



Scoreboard is made modular and consists of:

**Main board** - shows time of game (minutes, seconds, hundreds of second in last minute), results (0-199), match period or results in sets (0 to 9), serve/bonus and time-out; dimensions 180 x 180 x 10 cm; with alarm and commanding unit

**Faults display PN** - 5 faults for 2 x 12 players (6 faults optional); numbers from 0 - 99 (height of numbers 10cm); dimensions 80 x 180 x 10 cm

## Technical characteristics:

- power supply 230 V, 50Hz
- mobility of all parts of scoreboard
- max. power consumption 300 W
- simple and quick installing
- accuracy of clock +/- 0.02 sec/h
- simple manipulation
- microprocessor added operating enables simple changing of program in the case of changes of the game rules

## Options :

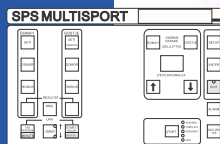
- scrolling text
- statistic display (team names, players, numbers)
- security net for scoreboard

# SPORT SCOREBOARD **SPS20**

Is suitable for use in big and middle size sport halls.

Height of numbers is 21 cm and enables clear display of results and time at a distance of 80 m. Displays are made of long-lived LED diodes (over 10 years) which ensure low use of electric power.

Using suitable options, scoreboard can be used for basketball, handball, volleyball, water-polo, etc.



## Scoreboard is made modular and consists of:

**Main board** - shows time of game (minutes, seconds, hundreds of second in last minute), results (0-199), match period or results in sets (0 to 9), serve/bonus and time-out; dimensions 140x130x10 cm; with alarm and commanding unit

**Action time display** - shows time of action and time out and time of game (displays height 10 cm); dimensions 52x35x10 cm

**Faults display** - 5 faults for 2 x 12 players (6 faults optional); and sum of team faults (height of numbers 21 cm); dimensions 70x130x10 cm

**Penalty display** - shows numbers of three players and time left till the end of penalties (height of numbers 21 cm); dimensions 70x130x10 cm

## Technical characteristics:

- power supply 230 V, 50Hz
- mobility of all parts of scoreboard
- max. power consumption 300 W
- simple and quick installing
- accuracy of clock +/- 0.02 sec/h
- simple manipulation
- casing:
- microprocessor added operating enables simple changing of programme in case of changes in game rules

## Options :

- scrolling text
- faults display with personal numbers 0 - 99
- security net for scoreboard

# SPORT SCOREBOARD **SPS21-S**

Is suitable for use in smaller sport-halls, schools, etc.

Height of numbers is 21 cm and enables clear display of results and time at a distance of 80 m. Displays are made of LED diodes, which are long-lived and ensure low use of electric power.

It's main advantages are :

- high mobility, small dimensions and weight (16 kg)
- simple manipulating
- simple installing (on wall, optional: self-standing)



Using suitable options, scoreboard can be used for basketball, volleyball, water-polo etc.

## Scoreboard enables professional game scoring through:

- setting match-times: period time, extensions time
- setting clock direction: increasing, decreasing manner
- measuring time: minutes, seconds; last minute in hundredths of seconds
- automatic raising of alarm
- results of two teams (00-199)
- synchronization of action time
- measuring time-outs on one of action-time displays prikazovalnikov akcijskega časa

**Scoreboard is made modular** and consists of:

**Main board** – SPS21S-OPL : time and results (0-199), dimensions 110x80x10 cm; with alarm

**Action-time displays** – SPS21S-AKČ : dimensions 41x31x10 cm – pair

**Keyboard** – SPS-TPK : for sport Scoreboard



## Technical characteristics:

- power supply 230V, 50Hz
- max. power consumption 100 W
- microprocessor added operating enables simple change of program in case of changes in game rules

## Options:

**Mesh screen** – SPS21S-ZM – metal mesh protective screen

**Electrical distribution cabinet** – SPS-ROM



# SPORT SCOREBOARD **SPS21-S SR**

Is suitable for use in smaller sport-halls, schools, etc.

Height of numbers is 21 cm and enables clear display of results and time at a distance of 80 m. Displays are made of LED diodes, which are long-lived and ensure low use of electric power.

It's main advantages are:

- high mobility, small dimensions and weight (16 kg)
- simple manipulating
- simple installing (on wall, optional: self-standing)

**Scoreboard enables professional game scoring through:**

- setting match-times: period time, extensions time
- setting clock direction: increasing, decreasing manner
- measuring time: minutes, seconds; last minute in hundredths of seconds
- automatic raising of alarm
- results of two teams (00-199)
- synchronization of action time
- measuring time-outs on one of action-time displays prikazovalnikov akcijskega časa

**Scoreboard is made modular** and consists of:

**Main board** – SPS21S-OPL : time and results (0-199), dimensions 110x80x10 cm; with alarm

**Keyboard** – SPS-TPK-LCD : for sport Scoreboard



**Technical characteristics:**

- power supply 230V, 50Hz
- max. power consumption 100 W
- microprocessor added operating enables simple change of program in case of changes in game rules

**Options:**

**Mesh screen** – SPS21S-ZM – metal mesh protective screen

**Electrical distribution cabinet** – SPS-ROM

# SPORTS SCOREBOARD **SPS21-N**

Best suitable for smaller sports halls, school gyms, etc. Using the appropriate optional accessories it can be used for soccer or futsal.

The height of the LED displays is 21 cm, which ensures good visibility up to a distance of 80 m.

The scoreboard features:

- High mobility, as the system is portable owing to its dimensions and low weight (16kg)
- Simplicity of use
- Easy mounting (to a wall, option: pedestal)

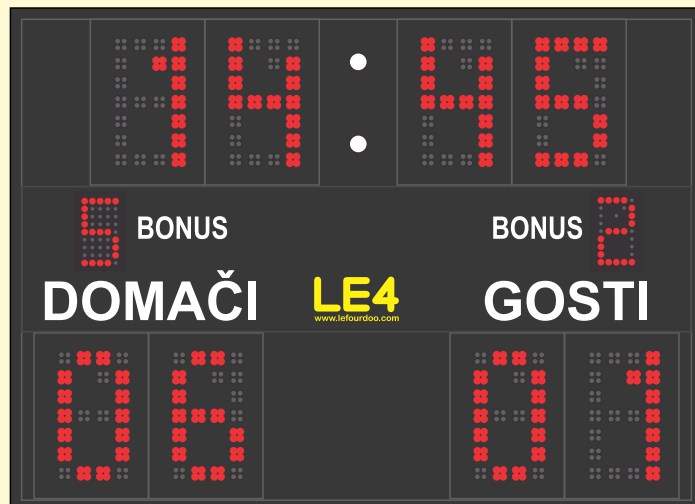
In spite of its simple design, it ensures professional tracking of sporting events as it features:

- Adjustable game time: period time, extension time
- Adjustable time direction: elapsed time, count-down timer
- Time measurement: minutes, seconds during count-down, the last minute is counted down in hundredths of a second
- Automatic alarm triggering
- Result tracking for two teams (0-199)
- Fault bonus tracking

The scoreboard features a modular design, as follows:

**The main display** - SPS21S-OPL displays time and result, includes a horn (0-199), dimensions 110 x 80 x 10 cm

**Keyboard** - SPS-TPK for the scoreboard in wired and wireless versions



## Technical specifications:

- Power supply: 230V, 50Hz
- Max. consumption: 100W
- Clock accuracy: 0.02 sec/h

Microprocessor-aided functionality ensures simple programme altering whenever game rules change

## Options:

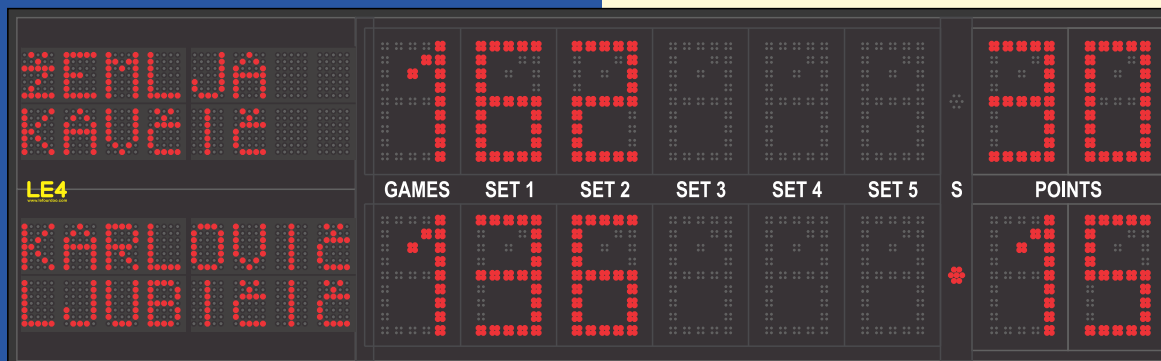
**Mesh screen** - SPS21S-ZM - metal mesh protective screen

**Electrical distribution cabinet** - SPS-ROM



# SPORTS SCOREBOARD **SPS-TEN27-5**

Designed for tracking TENNIS matches (singles and doubles). The height of the LED indicators is 27 cm for digits and 10 cm for player names.



The main display: displays game points, sets (3, 5), serves, match score, player name (fixed label or optionally printed out with LEDs).

The scoreboard may be mounted on a substructure or to a mobile wheeled pedestal.

The scoreboard features a modular design, as follows:

**The main display** - SPS-TEN27-5 shows the player names, point score, set score, match score and player serves.

Dimension: 2600 x 800 x 100 mm

**Control unit** - Keyboard SPS-TPK-TEN enables tracking of the tennis matches.

## Technical specifications:

- Power supply: 230V, 50Hz
- Max. consumption: 300W

Microprocessor-aided functionality ensures simple programme altering whenever game rules change

## Options:

Digit height on the main display (20, 27, 35cm)

Set display (3,5)

Player names (fixed Player 1, Player 2 or programmable names)

Controlled by a wired or wireless keyboard

Optional selection of an indoor or outdoor scoreboard

Display of game time and real time



# BACKBOARD LED INDICATOR **SPS-LSZ**

Designed to be used in conjunction with **SPORTS SCOREBOARDS**, which feature the **SPS 27A&U** or **SPS21S-AKČ** action time indicators.

**LED indicator** for the backboard is used to indicate offense and period expiration count-downs. It is designed to help the referees decide whether or not a player initiated a throw before or after the acoustic signal indicating the end of offence. Activation method may be different and depends on the control unit to which the LED indicator is connected (FIBA 2004).

The LED indicator is mounted along the inner edge of the backboard support frame. It is comprised of 5 segments with a total length of 490 cm. Its top feature is the simple mounting using specialised double-sided adhesive tapes requiring no drilling or other alterations to the backboard support frame.



## **Technical specifications:**

### **Electrical data:**

- Power supply: 12V DC +/-10%
- Consumption: 1.8 A

### **Indicator data:**

- LED colour: red
- LED number: 246
- Viewing angle: 20°

### **Housing:**

- Dimensions: 20 x 20 mm, 5 segments with lengths 720 mm, 900 mm, 1676 mm, 900 mm, 720 mm
- Total mass: 2.6 kg
- Material: aluminium
- Surface finish: powder coating
- Colour: White - RAL 9016
- Mounting: adhesive tapes

### **Module:**

Backboard LED indicator **SPS-LSZ**

Control unit **SPS-LSZ** to be installed in **SPS27 A&U (2 pcs)** – action time and game time indicator (**SPS21S-AKČ** – action time indicator)

# CONTROL UNIT **SPS-TPK LCD**

The LEA SPS 20, 21-S, 27 and 25 keyboards for sports scoreboards

The keyboard is designed to control the sports scoreboard for basketball, handball, futsal, hockey and volleyball. It makes it easier for the scorekeeper and the referees to keep track of the game.



## The main advantages of the new keyboard:

- the **LCD screen** can be used to follow the entire game
- All events are recorded to a file
- Auxiliary power supply enables uninterrupted continuation of the game in the event of a temporary power failure

## Ordering information:

SPS-TPK-LCD Sports scoreboard keyboard

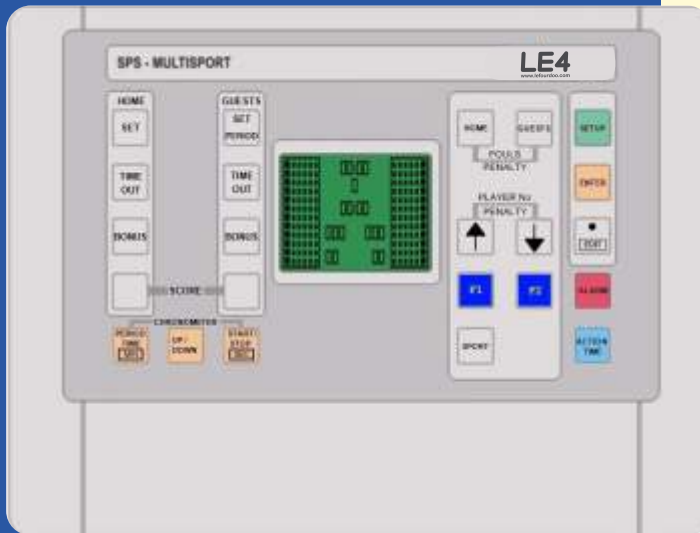
## Basic data:

- LCD screen: graphics field: 128 x 64 pixels, text field: 21 x 8 characters and high-quality keys
  - It contains two hand-held keyboards to control action time, game time and the score
  - Backup (12 hours) - in case of a power failure or other interruptions, all data is restored making it possible to continue the event as soon as the power is restored
  - Event history recording for the entire game
  - RS-485 communication with the scoreboard, 8m cable included
  - All major parameters (action time duration, game duration, count-down or elapsed time, game interruption durations) are adjustable.
  - Provides for simple upgrading of programmes whenever game rules change
  - Simple handling
- The keyboard is delivered in a convenient carrying and storage case

# CONTROL UNIT **SPS-WIRELESS**

The LEA SPS 20, 21-S, 27 and 25 keyboards for sports scoreboards

The keyboard is designed to control the sports scoreboard for basketball, handball, futsal, hockey and volleyball. It makes it easier for the scorekeeper and the referees to keep track of the game.



## The main advantages of the new keyboard:

- the **LCD screen** can be used to follow the entire game
  - All events are recorded to a file
- Auxiliary power supply enables uninterrupted continuation of the game in the event of a temporary power failure

## Ordering information:

- SPS-TPK-LCD Sports scoreboard keyboard
- SPS-WIRELESS R Wireless communication – receiver module
- SPS-WIRELESS S Wireless communication – transmitter module

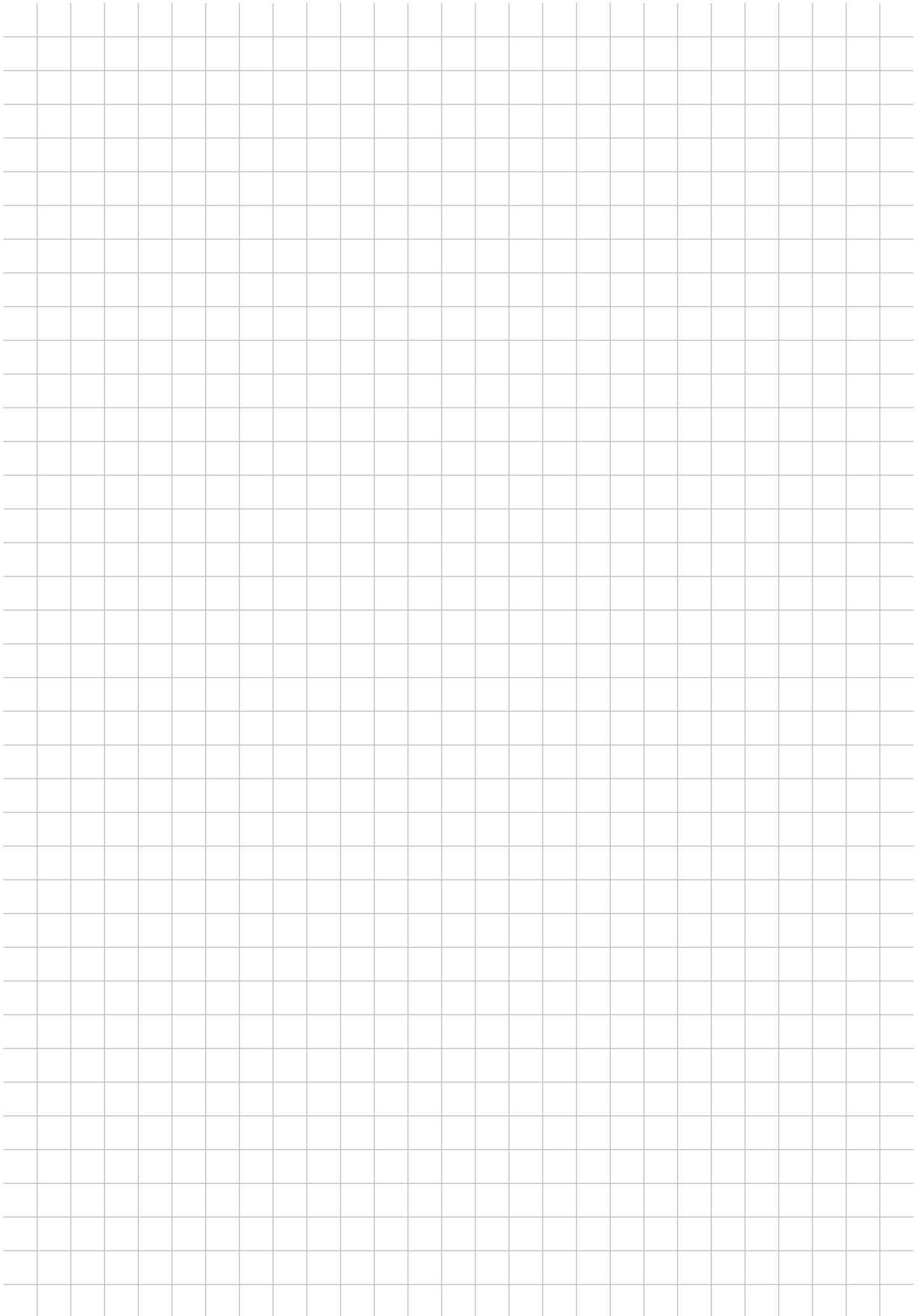
## Basic data:

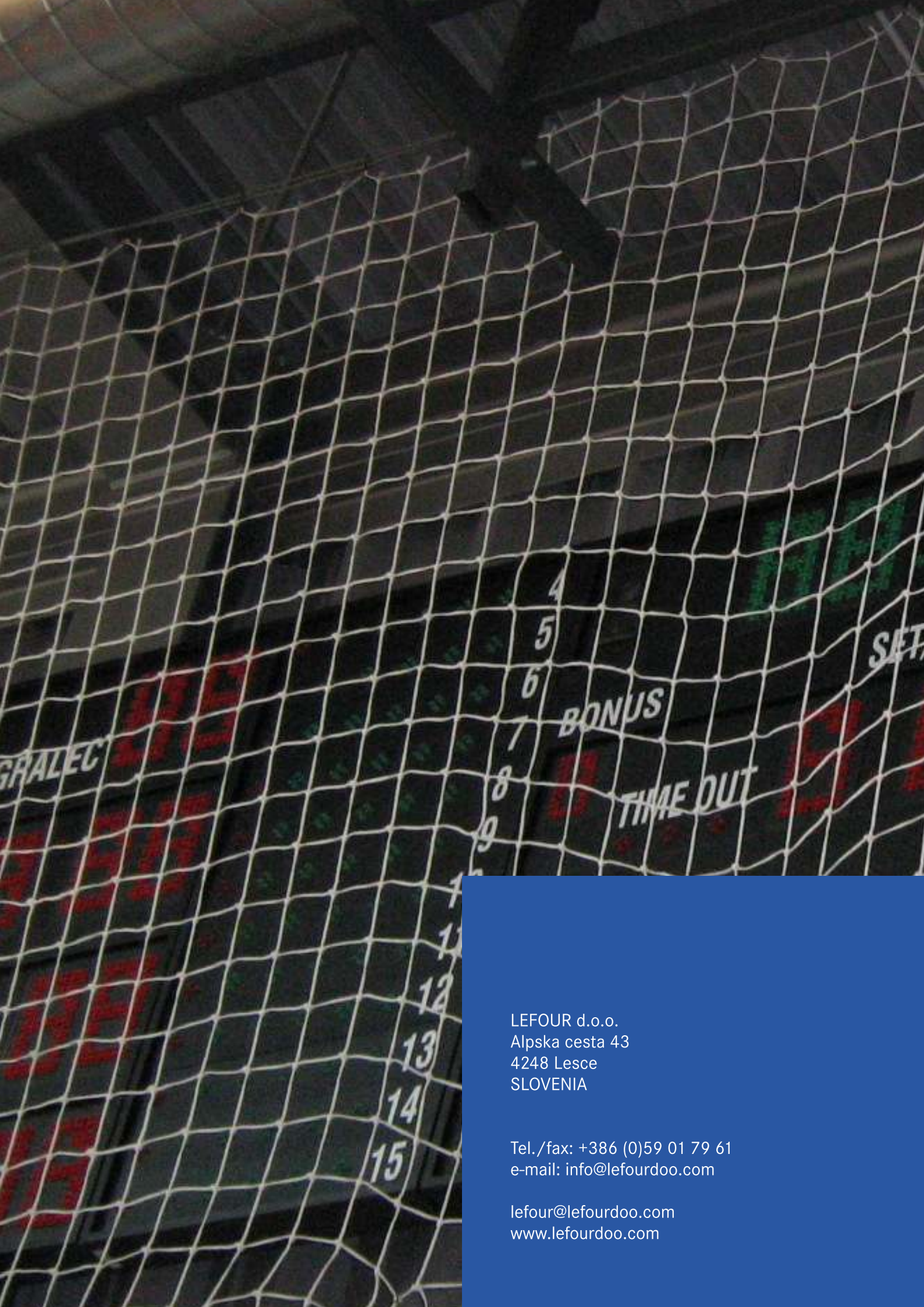
- LCD screen: graphics field: 128x64 pixels, text field: 21 x 8 characters and high-quality keys
  - It contains two hand-held keyboards to control action time, game time and the score
  - Backup (12 hours) - in case of a power failure or other interruptions, all data is restored making it possible to continue the event as soon as the power is restored
  - Event history recording for the entire game
  - RS-485 communication with the scoreboard, 8m cable included
  - All major parameters (action time duration, game duration, count-down or elapsed time, game interruption durations) are adjustable.
  - Provides for simple upgrading of programmes whenever game rules change
  - Simple handling
- The keyboard is delivered in a convenient carrying and storage case

## Options:

- Wireless communication**
- External whistle connection**
- Data transfer via serial communication (alteration of rules, etc.)**
- RS-232 port for connection to a PC**







LEFOUR d.o.o.  
Alpska cesta 43  
4248 Lesce  
SLOVENIA

Tel./fax: +386 (0)59 01 79 61  
e-mail: [info@lefourdoo.com](mailto:info@lefourdoo.com)

[lefour@lefourdoo.com](mailto:lefour@lefourdoo.com)  
[www.lefourdoo.com](http://www.lefourdoo.com)