

### Set up and operating instructions for **Rugby Scoreboards**



### Introduction

Our Rugby scoreboards can display the match score and the match time. The LED display digits are available from 6 to 16 inches tall.

To control the displays on the scoreboard there are 2 options.

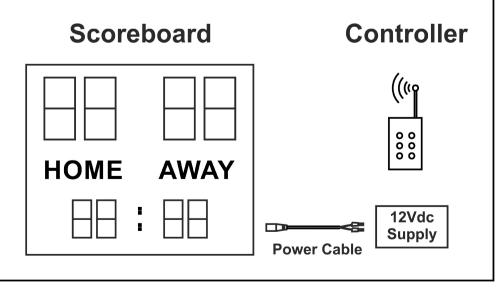
- A wireless handheld controller
- A small control panel mounted into the side of the scoreboard.

Both options operate in exactly the same way.

### Scoreboard Setup

Connect the scoreboard to the power supply with the power cable as shown in the diagram below. The power cable has two 4mm plugs which connect to the power supply or the leisure battery. The other end of the power lead is fitted with a 4 pin female XLR connector, which plugs into the scoreboard.

The scoreboard will illuminate fully once the controller has been switched on and the scoreboard has received data from the controller.



### Switching on

If you are using a wireless handheld controller with your scoreboard, then this is turned on by sliding the ON/OFF switch on the bottom of the controller towards the green power LED. The green LED illuminates to show that the controller is turned on

The scoreboard unit does not have an on/off switch. Therefore, when power is plugged in it is on, when power is removed, it is off.



Wireless handheld controller

#### **Timer operating instructions**

#### Start/Stop Button

Press the Start/Stop button to start the Timer. Pressing the Start/Stop button again will pause the Timer.

#### **Reset Button**

Press and hold down the Reset button to reset the time, it will take approximately 3 seconds. You can reset the timer whether it is running or paused.

#### Changing the Timer start time

To change the start time on the timer, press and hold down reset, then adjust the time in one minute intervals by pressing either the + or - buttons. It will take approximately 3 seconds of holding down the resetbutton before the time can be adjusted.

If the timer is reset to zero (0:00), it will count upwards when operated. Unless the timer is stopped, it will count up to 99 minutes and 59 seconds before rolling back to zero and stopping.

If the timer is reset to a time between 1 and 99 minutes, it will count down when operated. On reaching zero (0:00), the timer will stop. The timer will need to be reset before it can be operated again.

### Score operating instructions

#### Adjusting the score

To change the score of the Home team, keep the home button held down, while adjusting the score with the + or - buttons.

For the Away score, keep the Away button held down and adjust the score with the + or - buttons.

#### **Reset the score**

With the timer paused, the score can be reset back to nil - nil by pressing and holding down the Home and Away buttons simultaneously for about 3 seconds.

#### System Reset

The whole system can be reset if necessary back to the factory default of 0:00 for the time and nil nil for the score by holding down the reset button while switching on.

### Switching off

To switch the wireless handheld controller off, Slide the ON/OFF switch away from the green power LED. The green LED will turn off.

The scoreboard is turned off when the power is removed from the scoreboard.

The start time, Home score and Away score are remembered by the system and will be restored when power is reconnected. If the timer was running at the time of turning the scoreboard off, that time will be replaced with the start time at power on.



Base of wireless handheld controller

### Wireless transmitter

There is a delay of approximately two seconds following the controller being switch on, before data is transmitted from the control panel to the scoreboard.

The range of the handheld controller's wireless signal is typically up to 200 metres in open space. This range will be reduced by obstructions such as walls.

The height of the transmitter and receiver aerials above the ground will also effect the operating range. Having the controller sat on the ground will significantly reduce the signal strength when compared to raising the controller to waist height. This is due to the ground absorbing much of the transmitted output signal.

### **Scoreboard Status LED's**

A feature on the scoreboards facia, is the addition of 3 small LED's to indicate status of the scoreboard.

- Receiver Power
- Data Input Power
- 🔶 Data

The receiver power LED indicates there is power on the Receiver PCB inside the scoreboard. The data input power LED indicates there is power on the Data Input PCB inside the scoreboard.

# Bespoke <a>Scoreboards</a>

The data LED will flash each time the scoreboard receives data from the controller. If the Data LED stops flashing then the scoreboard is no longer receiving data from the controller and the timer/score can not be adjusted.

The most common causes of not receiving data are:

- The aerial is not connected to the wireless handheld controller.
- The batteries are about to, or have already run flat on the wireless handheld controller.

### Handheld controller recharging

The wireless handheld controllers have an internal rechargeable NiMH battery fitted.

To recharge the handheld controller, use a cable with a USB type-B mini connector (one is supplied with the handheld controller). Connect this to any 5 volt USB output (such as your phone charger) and allow 24 hours to fully charge the controller from flat.

If the handheld controller has not been charged, it is okay to power the controller from a USB power bank while still using the controller.

The handheld internal battery should last around 15 hours on a full charge.

### Leisure battery recharging

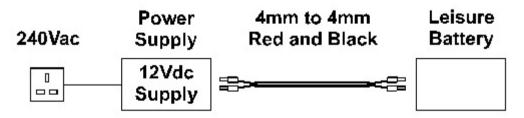
To recharge the leisure battery, connect it to the supplied power supply using the supplied red and black wires with 4mm plugs connected to each end.

To avoid possible short circuits, connect the leads in the following order.

- 1. Red plug to Red (+) socket on power supply
- 2. Red plug to Red (+) terminal on the battery
- 3. Black plug to Black (-) terminal on the battery
- 4. Black plug to Black (-) socket on the power supply

Lead acid batteries take a large amount of current when first put on charge. This current drops steadily as the battery becomes more charged, until it is reduced to a trickle as the battery becomes fully charged. This means that you do not need to be concerned about over charging if the leisure battery is left on charge for several days.

The 80Ah leisure battery supplied with your scoreboard has enough

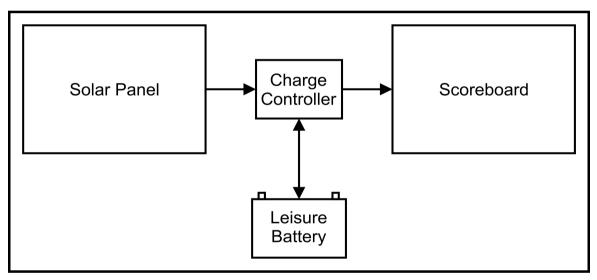


capacity to power a rugby scoreboard for approximately 15 hours. However to avoid the embarrassment of the battery going flat during a match, it is good to get into the routine of charging the battery regularly.

### Solar panel

If you don't have a mains electric supply to your scoreboard, then adding a solar panel to your system is a great addition. The solar panel is used to keep the leisure battery fully charged and saves someone at the club the effort of having to move the leisure battery for recharging. The solar panel does not replace the leisure battery, just complements it.

#### How it works



The solar panel provides the power to charge the leisure battery.

The charge controller regulates the power going into the battery to protect it from being over charged, and also regulates the power coming out of the battery to protect it from being over discharged.

The charge controller also regulates the output power to your scoreboard.

Our solar panel kit has everything you need. It includes:

- A solar panel. \*
- Solar panel mounting frame (for angling the panel to get maximum energy from the sun).
- Mounting brackets for wall or pole mounting.
- A charge controller.
- All the cables, clearly labelled with the correct connectors required to connect it all together.

#### Set up

Connect your leisure battery to the charge controller first, then connect the solar panel to the charge controller. Finally connect the charge controller to your scoreboard.

#### Turning scoreboard on and off

To power your scoreboard on and off, simply press the power button on the charge controller.

\* We normally supply a 120 watt solar panel, however the market changes quite quickly so it may have a higher wattage or slightly lower. Regardless of the finer details, it will still be more than sufficient to provide enough power for your scoreboard over the darker winter months.

### Servicing

All our products come with a 12 month back to base warranty as standard, so please contact us if you have any issues during that time and we will get them resolved asap. We are proud to provide scoreboards that work.

We designed, manufactured and probably installed your scoreboard, so should anything go wrong in the future, we will be able to fix it.

Please call and discuss any issues you may have with your scoreboard. We will be able to guide you to test and diagnose any faults with your system, and arrange a service visit if that is required.

Servicing prices are available on our website.





#### Bespoke Scoreboards are designed and made in England by

M-Jay Electronics Limited Albion Mills Church Street Morley Leeds LS27 8LY phone: 0113 2524956 0113 2525582

email: david@bespokescoreboards.co.uk john@bespokescoreboards.co.uk

Published September 2021 www.BespokeScoreboards.co.uk/rugby.html