



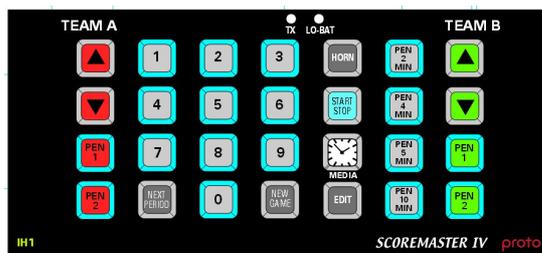
# Operating & Setup Instructions

## Ice Hockey Scoreboard

The Proto Electronics LED matrix scoreboard incorporates a full Ice Hockey scoreboard with user configurable team names, configurable messages and image slideshows for advertising.



The scoreboard is provided with two wireless remote controls, one for use during the game (*Game Remote*), the other dedicated to setting up the text (*Text Remote*).



### The Game Remote

The *game remote* is used to control the scoreboard during the game, start and stop the clock and to modify the displayed score and penalties. The game remote is also used to configure the scoreboard parameters that are specific to the rules of the game to be played.

### The Text Remote

The *text remote* is used to configure team names, media text and configure the media behaviour.

The *text remote* can also be used to select images to be displayed on the scoreboard during a game.

# Quick-start Guide

## Before a Game

- a) Turn on the scoreboard.
- b) If ENHANCED MEDIA is enabled you will see advertising, push any button and wait until scores and game time are visible.
- c) Press EDIT on the game remote and select the team names for each side using the UP/DOWN arrows on the game remote.
- d) Press EDIT again to select the required game configuration e.g. 1,2,3,4  
Note: Game configurations select a preconfigured game with various period times and intervals if required.
- e) Press RESET GAME to return to the scoreboard scores and game time.

## Playing a game

- a) Press CLK to start the game timer.
- b) Score using the red and green UP/DOWN arrows.
- c) Press CLK to pause the game timer. Press CLK again to resume.
- d) At the end of a period the next period will automatically load. Press CLK when you want to start the timer again.
- e) Pressing the NEXT PERIOD key, loads the next period time.

## Penalties

- a) Press PEN 1 or PEN 2 for the desired team.
- b) Using the number keys enter the player number.
- c) Press the required penalty time 2, 4, 5, or 10 Minutes.

Note: If the game clock is running the penalty will start counting immediately.

## When the game timer is paused

- a) You can modify the game clock by pressing edit. The time will then flash and you can edit the minutes using the red UP/DOWN and the seconds using the green UP/DOWN. When the desired time is set press edit again.
- b) You can display the time of day by pressing the Clock/Media button, pressing clock again displays basic and enhanced media.

## Game Graphics

- a) During a game, you can use the text remote to display pictures or text, for example an image that represents 'GOAL' or 'FOUL' can be used to enhance the spectator experience. User images can be added, providing they are created in the correct format as detailed later within this document.

To reset the scoreboard press RESET GAME 3 times in succession, while the clock has stopped.

## Game Configuration

This option is only available on initial scoreboard power-up or after a reset (press RESET GAME 3 times). After a reset immediately press the EDIT button once and the following configuration items will be available:

Note: It is possible to exit edit mode immediately by pressing the NEXT PERIOD or RESET GAME buttons.

The following edit items are available:

- a) Set Team Names
- b) Set Game Configuration
- c) Set Scoreboard Brightness
- d) Set 12/24 Hour Clock
- e) Set Number of Game Periods
- f) Set Timer Mode for Period
- g) Set Period Text
- h) Set Start time for Period
- i) Set End time for period
- j) Set Horn for end of period

### Set Team Names

The score numbers indicate the memory location where the desired name is stored. The scoreboard is capable of storing 100 (0 to 99) user configurable entries. Use the Team score UP/DOWN buttons to scroll through the list of entries. The left UP/DOWN score button selects the scoreboard left team name; the right UP/DOWN score button selects the right team name.

Once selected use the EDIT button to configure further game options, or push RESET GAME to save the selected names and start the game.

Note: The configurable entries are modified using the *Text Remote* as described later in this document.

### Set Game Configuration

The scoreboard allows 4 different pre-set Rugby/Hockey configurations. This is useful if for example the scoreboard is used regularly for junior and senior games. Each configuration specifies an independent number of periods, associated start and end times, horn behaviour and timer mode.

### Set Brightness

Use the UP/DOWN buttons to adjust the scoreboard brightness.

### Set Time 12/24

Use the UP/DOWN buttons to switch between a 12 and 24 hour clock display.

### Set clock time

Use the red UP/DOWN buttons to adjust the hours and green UP/DOWN buttons to adjust the minutes.

### **Set Number of Periods**

Set the number of period timers for the current configuration.

Note: If a warm-up timer or an interval is required add additional period timers as required.

### **Set Timer Mode for Period**

There are 3 timer modes for every period.

- a) AUTO STOP, the timer stops at the end of the period time
- b) RUN ON, the timer continues on past the end of period time
- c) AUTO NEXT PERIOD, the timer stops, and the next period is automatically loaded

### **Set Period text for Period**

The following text options may be selected to be displayed in the centre of the scoreboard for a given period.

- a) No text shown
- b) "WARM-UP"
- c) "Int1, Int2, Int3, Int4"
- d) "Q1, Q2, Q3, Q4"
- e) "HALF TIME"
- f) "1, 2, 3, 4, 5, 6, 7, 8, 9 10"

### **Set Start Time for Period**

Use the red UP/DOWN buttons to adjust minutes, green UP/DOWN to adjust seconds.

### **Set End Time for Period**

Use the red UP/DOWN buttons to adjust minutes, green UP/DOWN to adjust seconds.

### **Set Horn for Period**

There are 4 horn modes for every period. Use the UP/DOWN buttons to select the required horn option for a given period

- a) HORN OFF
- b) HORN SHORT
- c) HORN LONG
- d) HORN DOUBLE

# Text and Media Configuration

## Selecting Media

The scoreboard is capable of displaying basic images and message during a game. These messages are selectable via the text remote buttons 0 to 9. Pressing the BACK key on the text remote reverts back to the scores and timer scoreboard.

## Slide Show

Pressing the slide show button starts a preconfigured set of messages or images to be displayed. Press any game remote button, or the text remote BACK button to resume the scoreboard display.

## Basic Image Format

The USB memory stick can hold 10 images which must be labelled "image1.bmp", "image2.bmp"... to "image10.bmp". Image 1 will always be associated with button 1, image 2 will always be associated with button 2, and so on. Button 0 will be associated with image 10

These images must be saved as 80 pixels wide by 80 pixels high with a pixel depth of 24bit. Note: The basic images can only display RGB pixels, with no greyscale. Images may appear incorrectly if care isn't taken when generating images to be displayed.

## Enhanced Media

The scoreboard also includes a separate enhanced media engine. This allows more complicated images to be displayed, including small animations, videos, and slideshows with fancy transitions.

The enhanced media engine can be set to wake-up on power-up so advertising can be displayed without the need to find the remote controls. The enhanced media engine can also be accessed by pushing the SLIDE SHOW button twice.

## Media Menu

The media menu has the following options:

- a) Edit team names
- b) Edit Media Text
- c) Configure Media Keys
- d) Select Basic Slides
- e) Set Slideshow timer
- f) Set Enhanced Media Enable

## **Edit Team Names**

### Select Team Name Entry Number

Use the number keys to select the memory location to modify. Note: The scoreboard has 0 to 99 entries that can be modified.

### Edit Team Text For Entry #X

Use the texting keys to type in the name required use the BACK key to delete text.  
Note: Space is limited and a team name will only fit half the width of the scoreboard.

## **Edit Media Text**

There are 10 screens of media text each is 4 lines high, each number button is associated with 1 screen each. Press the number associated with the media message that you wish to edit. Use the edit key to select the next line.

## **Configure Media Keys**

Each number key can bring up either an image or media text. Use this menu to select the behaviour of each number key.

## **Select Basic Slides**

The basic slideshow is limited to a mixture of 10 media messages or basic images. Use the keys to enable the desired item to be displayed during a basic slideshow.

## **Set slideshow Timer**

Use the UP/DOWN arrows on the text remote to configure the delay between slides

## **Set Enhanced Media Enable**

This enables the enhanced media engine. The enhanced media will then be shown on power-up, after a scoreboard reset, or selectable via the SLIDESHOW button.

## **Configuring the enhanced Media Engine**

The scoreboard needs to be connected to a PC directly via a gigabit Ethernet link. The PC requires the software "LEDShowT9" to be installed available from:

<http://www.lednets.com/en/ProductView.asp?ID=54&SortID=8>

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