Operating & Setup Instructions
Rugby/Hockey/Football Scoreboard

The Proto Electronics LED matrix scoreboard incorporates a full Rugby/Hockey/Football 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. 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.

Rugby

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) The TRY, CONVERSION or PEN/DROP buttons will cause both team scores to flash, select the team to merit the score to using the red or green UP arrows.
d) Press CLK to pause the game timer. Press CLK again to resume.
e) At the end of a period, stop the clock and double press NEXT PERIOD (RESET PERIOD) to advance to the next period. Press CLK when you want to start the timer again.

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.

Game Graphics

a) During a game, you can use the text remote to display pictures or text, for example an image that represents 'TRY' or 'CONVERSION' can be used to enhance the spectator experience.
b) During the game if the game clock is paused, you can use the 'CLOCK' button to start a slide show. Press once for time of day, press again for basic slideshow, press again for enhanced slide show.

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

Hockey

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) The SHOT / GOAL button starts a 40 second timer at any time during the game for use with corner penalties .
d) If the game goes into penalty shootout, the last period times is set to 8 seconds & can be reset by pressing the SHOT / GOAL button.
e) Press CLK to pause the game timer. Press CLK again to resume.
f) At the end of a period the next period will automatically load. Press CLK when you want to start the timer again.

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.

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 'CORNER' can be used to enhance the spectator experience.

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 Display Position
    d) Set Scoreboard Brightness
    e) Set 12/24 Hour Clock
    f) Set Time of Day
    g) Set Try Value (Rugby Only)
    h) Set Conversion Value (Rugby Only)
    i) Set Penalty Value (Rugby Only)
    j) Set Hockey Corner Time (Hockey only)
    k) Set Number of Game Periods
    l) Set Timer Mode for Period
    m) Set Period Text
    n) Set Start time for Period
    o) Set End time for period
    p) 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 Display Position

Use the UP/DOWN buttons to toggle between centralised and right-justified Display positions.

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 Try Value

Use the score UP/DOWN buttons to select the required score value for a try.

Set Conversion Value

Use the score UP/DOWN buttons to select the required score value for a conversion.

Set Penalty Value

Use the score UP/DOWN buttons to select the required score value for a penalty.

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

The following Period timer modes may be selected.

    a) TIMER AUTO STOP, the timer automatically stops at the end of the period time.
    b) TIMER RUN ON, the timer continues on past the end of period time (the clock must be stopped manually).
    c) AUTO PERIOD, the timer stops at the end of the period time and the next period is automatically loaded.
    d) TIMER AUTO RUN, the timer stops at the end of the period time, the next period is loaded and the timer automatically re-starts.
    e) SHOOTOUT CLOCK (Hockey only). Uses shootout button at the end of a game.

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"
    g) "P1, P2"

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.

For a Full Panel display, these images must be saved as 160 pixels wide by 80 pixels high with a pixel depth of 24 bit. For a Half Panel display, the images must be saved as 80 pixels wide by 80 pixels high with a pixel depth of 24 bit.

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

Press EDIT on the alphanumeric remote to access the media menu.

The media menu has the following options:

a) Edit team names
b) Edit Media Text
c) Media Keys
d) Basic Slide Show (uses USB stick)
e) Slideshow (timer)
f) Enhanced Media

Edit Team Names

a) Ensure scoreboard in game mode with clock stopped.
b) Press EDIT on the alphanumeric remote
c) Press 1
d) Press Slide SHOW to scroll through the team names or enter name position using keypad.
e) Once a blank space or name requiring editing appears press Edit, then repeatedly press ↵ to remove characters.
f) Use keypad to enter new characters.
g) Press SLIDE SHOW to move to next name or press EDIT twice to return to the game.

Note: Space is limited and a team name will only fit half the width of the scoreboard. Selecting 'Right Justified' mode through the Edit command will allow longer names to be displayed.

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 majority of Enhanced Media Cards fitted to the scoreboard will either be of type 'A8', 'I5/I5 Enhanced' or 'C10'. If a different card is fitted, please contact Proto Electronics for further instructions.

For the 'A8' card, download LEDSHOWT9 software; for the 'I5' card, download LEDVISION software. Both programs may be downloaded from http://www.lednets.com/en/DownList.asp.

For the C10 card, download LEDEDITOR software. This program may be downloaded from http://sysolution.net/download.html

LEDVISION

The following instructions refer to version 4.20 of the software, the latest version at time of printing.
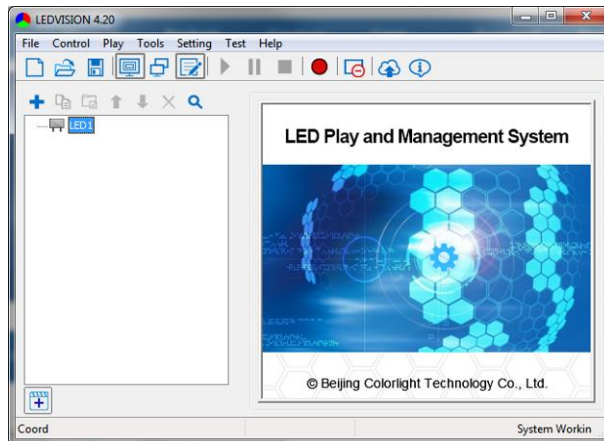
To configure the media card follow the following steps:

1. Connect the 'I5/I5 Advanced' media card directly to the laptop Ethernet port (Do not use Ethernet hub or router as software needs a direct connection)

2. Go to *Control->Screen Control*

3. Ensure *Use Net Card* is ticked and click *Detect* button

4. A small image should appear in the top of the screen similar to that below

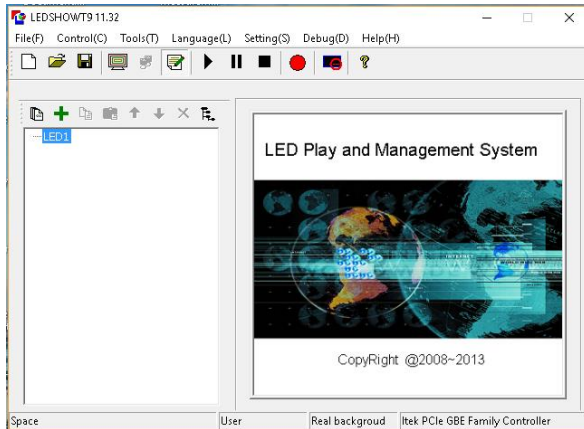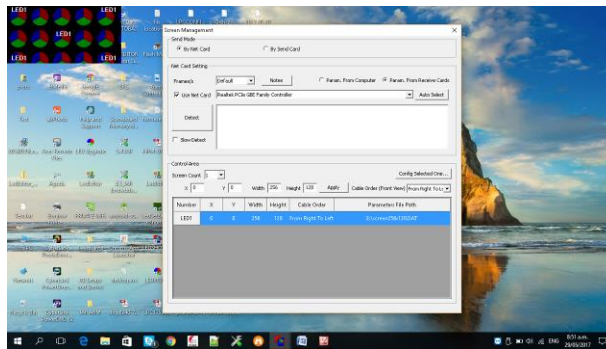Image here should match what appears on scoreboard

5. Make the screen resolution match the scoreboard then press *Apply*.

For a P16 Full Panel 160x80 pixel screen, these settings are as follows;

Count = 1, X = 0, Y =0. Width = 160, Height = 80.

For a P16 Half Panel 80x80 pixel screen, these settings are as follows;

Count = 1, X = 0, Y =0. Width = 80, Height = 80.

6. Close the screen management dialogue box to return to the Main screen.
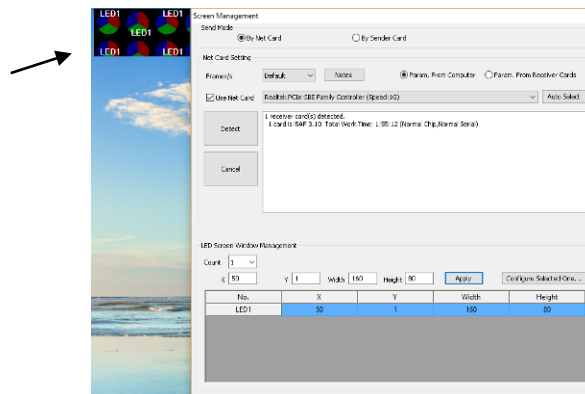
7. Right click *LED1* and select *Normal Page* from the page Properties, select *Background picture->Please choose a background picture*. Locate the image, logo etc on your computer and select it.

8. The image should now appear on the scoreboard, if the image is cropped ensure the resolution is set correctly (see steps 2-6). If the image is blurred, try and find an image that has the same aspect ratio as the screen and the same resolution.

9. The time for the image to be displayed can be entered into the *Play Duration box.*

10. Keep adding images and times by repeating steps 7- 9, once all images are entered press the *blue Play button* on the tool bar to preview the slideshow.

10. Once happy with the images and timing, press the *red Record button*, the slideshow is now loaded into the card and will appear any time Enhanced media is selected from the remote.

LEDSHOWT9
The following instructions refer to version 11.32 of the software, the latest version at time of printing.

To configure the media card follow the following steps:

1. Connect the 'A8' Advanced media card directly to the laptop Ethernet port (Do not use Ethernet hub or router as software needs a direct connection)

2. Go to *Control->Screen Management*

3. Ensure *Use Net Card* is ticked and click *Detect* button

4. A small image should appear in the top of the screen similar to that below

Image here should match what appears on scoreboard

5. Make the screen resolution match the scoreboard then press *Apply*.

For a P16 Full Panel 160x80 pixel screen, these settings are as follows;

Count = 1, X = 0, Y =0. Width = 160, Height = 80.

For a P16 Half Panel 80x80 pixel screen, these settings are as follows;

Count = 1, X = 0, Y =0. Width = 80, Height = 80.

6. Close the screen management dialogue box to return to the Main screen.

7. Right click *LED1* and select *Blank Page.* From the page Properties, select *Back picture->Choose a background picture*. Locate the image, logo etc on your computer and select it.

8. The image should now appear on the scoreboard. If the image is cropped ensure the resolution is set correctly (see steps 2-6). If the image is blurred, try and find an image that has the same aspect ratio as the screen and the same resolution.

9. The time for the image to be displayed can be entered into the *Play Management box.*

10. Keep adding images and times by repeating steps 7- 9, once all images are entered press the *blue Play button* on the tool bar to preview the slideshow.

10. Once happy with the images and timing, press the *red Record button*, the slideshow is now loaded into the card and will appear any time Enhanced media is selected from the remote.

LEDEDITOR
*The following instructions refer to version 9 of the software.*
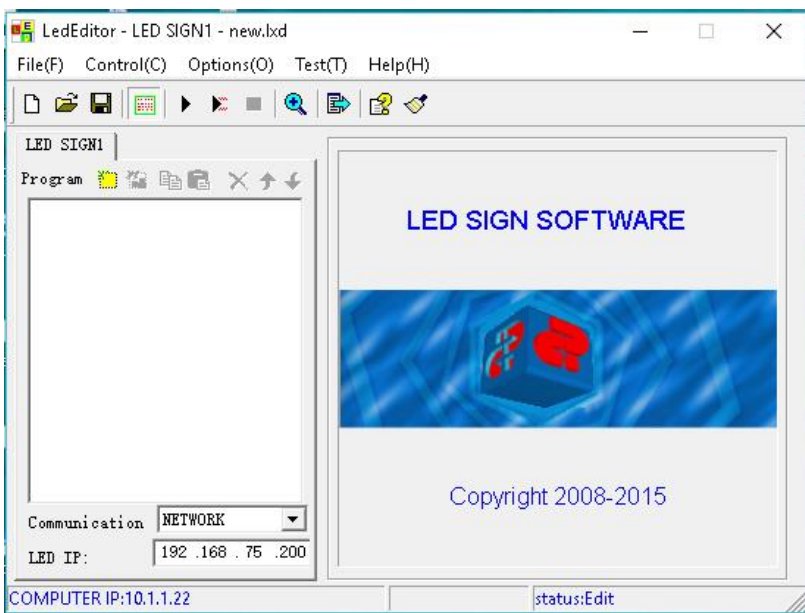
To configure the media card follow the following steps:

1. Connect the 'C10' Advanced media card directly to the laptop Ethernet port (Do not use Ethernet hub or router as software needs a direct connection).

2. The program should automatically detect any cards on the network and display their i.p. addresses. Select the appropriate card and press OK.

3. Go to *Option->Software Setup.*

4. Make the Width and Height parameters match the scoreboard resolution:

      For a P16 Full Panel : 160 and 80 respectively.

      For a P16 Half Panel: 80 and 80 respectively.

      For a P10 Full Panel: 192 and 96 respectively.

Press OK to return to the main screen once both parameters have been entered.

5. A small image should appear in the top of the screen similar to that below

Image here should match what appears on scoreboard
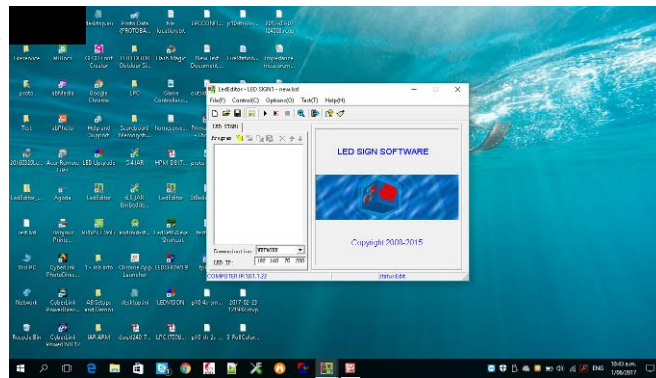
6. Under tab 'LED SIGN1', select the yellow 'step' icon and choose 'Add Step'.

7. Select the yellow icon containing the green, red and white squares and choose 'File Window'. In the File Window, select the yellow icon to add a file to the File List window (locate the desired image, logo etc on your computer and select it).

8. The image should now appear on the display window at the top of the screen. If the image is cropped ensure the resolution is set correctly (see steps 3-4). If the image is blurred, try and find an image that has the same aspect ratio as the screen and the same resolution.
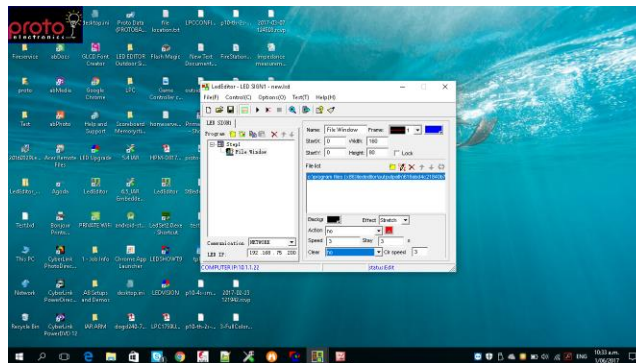
9. The time for the image to be displayed can be entered into the *Step1 Time box.*

10. Keep adding images and times by repeating steps 6- 9, once all images are entered, press the black 'play' button on the tool bar to preview the slideshow.

10. Once happy with the images and timing, press the blue arrow button on the tool bar, the slideshow is now loaded into the card and will appear any time Enhanced media is selected from the remote.

Please note that these are all third-party software, and are not maintained by Proto Electronics. Staff at Proto Electronics have some experience with using the software, but are not responsible for their maintenance. If you have any queries regarding the set-up of the software you are welcome to contact Proto Electronics for advice, but Proto are not responsible for any compatibility issues that may occur during their use.