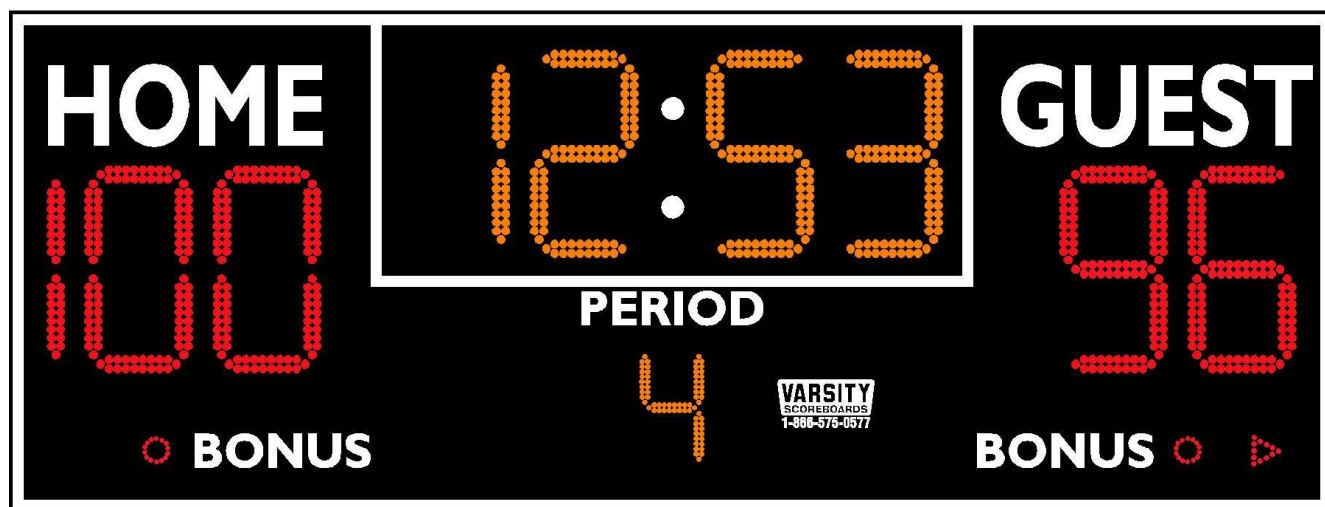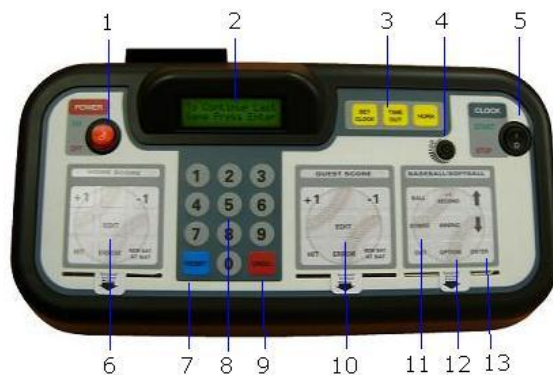# OPERATION INSTRUCTIONS
FOR

MODEL VSBX-236LED

www.varsityscoreboards.com

CONTROLLER DEFINITIONS

Before continuing, take a few moments and familiarize yourself with the following terms as they apply to the controller. They are referenced frequently throughout this manual.

1. POWER Switch:
> The POWER switch is used to turn the controller ON and OFF.

2. LCD Display:
> The controller's LCD displays all scoring information and option settings. Even though your scoreboard may not be equipped to display all scoring information discussed in this manual, all of this information will appear on the controller's LCD.

3. CLOCK Controls:
> The CLOCK controls are used to set, start, and stop both the game clock and timeout clock. The horn button is also located in this section of the controller's keypad.

4. CONTRAST Knob:
> The CONTRAST knob is used to change the brightness of the text in the LCD Display.

5. CLOCK Start/Stop Switch:
> The CLOCK Start/Stop Switch is used to start and stop the game clock.

6. HOME SCORE Keypad:
> The HOME SCORE keypad is used to enter scoring information for the HOME team.

7. RESET Key:
> The RESET key is used to begin a new game. Using this key will clear out the status of an existing game and reset the scoreboard to the default startup values. When pressed and held for three seconds, the RESET key clears all scoring information while saving all option settings. This key is also used in combination with the OPTION key to enter the option menu.

8. NUMERIC Keypad:
> The NUMERIC keypad is used to enter values when setting options and editing scoring information. This section also contains the RESET and UNDO keys.

9. UNDO Key:
> The UNDO key is used to undo the last controller entry.

10. GUEST SCORE Keypad:
> The GUEST SCORE keypad is used to enter scoring information for the GUEST team.

11. GAME Keypad:
> The GAME keypad is used to enter values related to game play.

12. OPTION Key:
> Pressing RESET, quickly followed by the OPTION key enters the option menu.

13. ENTER Key:
> The ENTER key is used to accept any entry while in the option menu and to continue the last game scored when the controller is first turned ON.

COMMUNICATION CABLES

Connecting a Hard Wired Cable:
- Using the supplied 20-ft. DIN cable, connect one end to either of the DIN sockets on back of the controller and the other end to the junction box receptacle.

- Connect the AC Adapter to the power jack on the back of the controller and into a standard 120V power source. If you are not using a wall receptacle, make sure the connection is stable. A power strip serves as a better power source than an extension cord. Extension cords do not always provide a stable power source.

Cable Connection

Wireless Connection
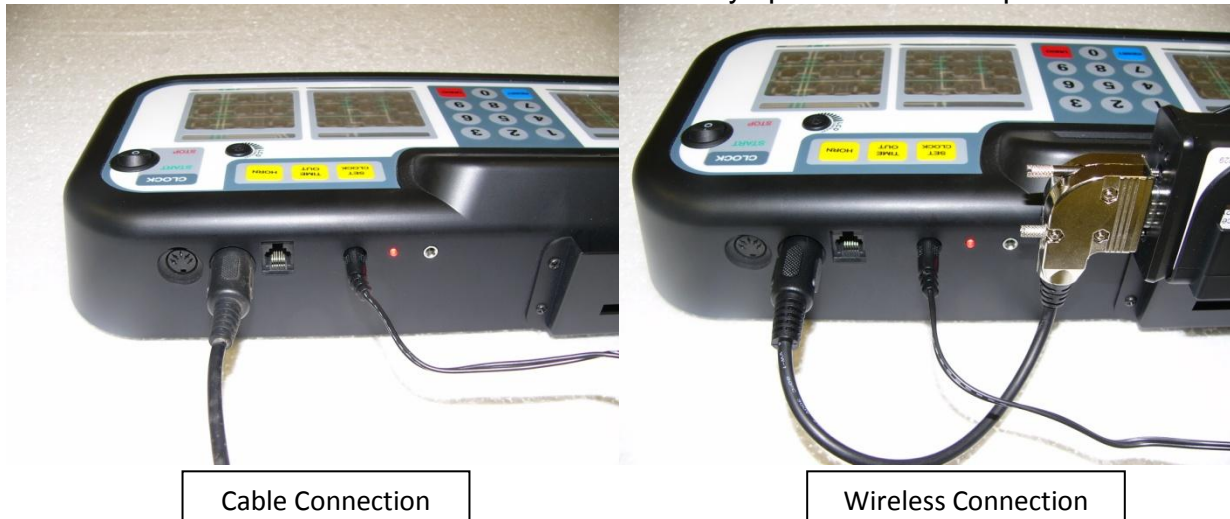
Connecting a Wireless Transmitter:
- Connect the transmitter to the controller by plugging one end of the transmitter's attached interface cable into the transmitter and the other end to *either* of the controller's DIN sockets on back of the controller. Place the transmitter into the supplied clip on back of the controller.

- Connect the AC Adapter to the power jack on the back of the controller and into a standard 120V power source. If you are not using a wall receptacle, make sure the connection it stable. An outlet bar serves as a better power source than an extension cord. Extension cords do not always provide a stable power source.

GETTING STARTED

Begin by making sure the Game Inserts that came with your scoreboard are in the proper location on the controller, as in the image below.

A Note about the LCD Display:

The LCD display provides the scorer with any information that the scoreboard will display. The Up/ Down Arrows on the GAME Keypad are used to scroll the information on the LCD Display. There are two lines of text. Pressing either arrow will cycle those lines of text.

When the **POWER** switch is turned *ON* the controller's LCD will show the following:

To Continue Last Game Press ENTER, To Start New Game Press RESET

Pressing either **ENTER** or **RESET** will enter the controller's game mode selection list. From here, the operator can begin scoring the game or enter the option menu where the game may be changed and keyboard options such as contrast and clock functions may be set.

- Pressing **ENTER** will recall information from the last game that was played and display it on the controller and scoreboard. At this time game play can resume.

- Pressing **RESET** will begin a new game. The controller will display the default start up information with no scores, the default time on the clock, and Period will be 1.
- To access the option menu press **RESET** quickly followed by **OPTION**.

OPTIONS MENU

The scoreboard controller is configured with default settings. Use this section of the Operating Instructions manual to make changes to the default settings. To access the Options Menu the controller must first be in "game" mode. When the controller is turned on and either **RESET** or **ENTER** has been pressed to begin game play the controller is in "game" mode. Begin with making sure the controller is in the "game" mode you are scoring. The mode will be briefly displayed on the LCD when the controller is first put into "game" mode.

Changing Game Modes:

Access the option menu by pressing **RESET** quickly followed by **OPTION**. Once you have placed the controller in the Options Menu, the controller's LCD should display **SELECT OPTION** on the top line and **<SELECT GAME>** on the second line. For this scoreboard, basketball, volleyball, and wrestling are the available games modes.

- Use either the up or down arrow key to select the game mode you wish to score then press **ENTER**.

Changing Game Settings:

Access the option menu by pressing **RESET** quickly followed by **OPTION**. Notice the bottom line of text on the LCD Display. Make sure the controller is in the game mode that you wish to set options for.

- At the **<SELECT GAME>** prompt, press **ENTER**.
- Use either the up or down arrow key to select the options that are available.
- Now, the bottom line on the LCD displays the current game mode. If the settings for the current game mode are what you want to edit, press **ENTER**.
- If you are changing game modes, scroll to the game mode of choice and press **ENTER**.

The options that are available for the selected game mode are shown on the bottom line of text of the LCD display.

- By using the up or down arrows, scroll to the setting you want to change and press **ENTER**.
- If the option you are adjusting is time related; such as the game clock, enter the new time with a four digit entry. Here are two examples;
  Eight minutes – 0800, and press **ENTER**
  Twelve minutes – 1200, and press **ENTER**.
- Other than time related options, adjust the selected option or to turn on or off the selected function, use the up and down arrow keys and press **ENTER**.
- To select and set other options follow the steps above until all desired options have been set, then press **OPTION** to exit the option menu.

NOTE: Refer to the chart at the end of this manual for the options that are available.

GAME SETTINGS

SET CLOCK button:

The clock can be set for a "one time" amount of time. This is useful for intermissions and breaks in game play. After the clock ticks down to zero, the clock resets to the time that is stored in memory. To set the game clock so that the entered time **IS NOT** stored in memory as the default game clock time:

- Stop the game clock by moving the **CLOCK** switch to the *STOP* position.
- Press the **SET CLOCK** key on the controller
- At the prompt, enter the desired time using the numeric keypad then press **ENTER**.

Example: To enter a time of 12 minutes, press 1, 2, 0, 0, then **ENTER**. To enter a time of 8 minutes press 0, 8, 0, 0, then **ENTER**.

Changing the Default Clock Settings:

To set the game clock so that the entered time will be stored in memory as the default game clock time, do the following:

Make sure that the controller is in the proper game mode. The game mode is displayed after the controller is turned on and either the **RESET or ENTER** button is pressed. If it is not in the proper game mode, refer to the **OPTIONS MENU/Changing Game Modes** section of this manual.

- Enter the option menu by pressing **RESET** followed by **OPTION**.
- At the **<SELECT GAME>** prompt use the up or down arrow key to select **<SET GAME CLOCK>** then press **ENTER**.
  At the prompt, use the numeric keypad to enter the desired time and press **ENTER**.
  > Example: To enter a time of 90 minutes, press 9, 0, 0, 0, then **ENTER**. To enter a time of 8 minutes, press 0, 8, 0, 0, then **ENTER**.

Team Fouls:

In order to track Team fouls, the **<TEAM FOULS>** option must be turned on in the controller's options menu. To activate TEAM FOULS do the following steps:

- Enter the option menu by pressing **RESET** quickly followed by **OPTION**.
- At the **<SELECT GAME>** prompt, press either the up or down arrow key until the **<TEAM FOULS>** prompt is displayed, and press **ENTER**.
- To activate team foul scoring, press either the up or down arrow key once to change the prompt to **<ON>** then press **ENTER.**
- Press **OPTION** to leave the Options menu.

Bonus Tracking:

To track and display **BONUS** and **DOUBLE BONUS**, the **<TEAM FOULS>** option must be turned on in the controller's option menu. If TEAM FOULS is not enabled do the following steps:

- Enter the option menu by pressing **RESET** quickly followed by **OPTION**.
- At the **<SELECT GAME>** prompt, press either the up or down arrow key until the **<TEAM FOULS>** prompt is displayed, and press **ENTER**.
- To activate team foul scoring, press either the up or down arrow key once to change the prompt to **<ON>** then press **ENTER.**
- Once **<TEAM FOULS>** has been enabled, while still in the Options Menu, use the **UP** or **DOWN** arrow keys to scroll to **<BONUS TRACKING>** and press **ENTER**.
- Choose from **<TRACK BONUS>**, **<TRACK DOUBLE>**, **<MANUAL BONUS>** or **<MANUAL DOUBLE>** and press **ENTER**.
- The default **BONUS FOULS** and **DOUBLE BONUS FOULS** values are 7 and 10. If those settings are what you will use, press the **OPTION** key.
- If you will use different values, go into each feature and change the setting as in the previous steps.

Manual Bonus:
- Requires the scorekeeper to keep track team fouls and press the BONUS key on the appropriate team's keypad when a team has reached a bonus situation.

Manual Double:
- Requires the scorekeeper to keep track team fouls beyond the initial bonus and press the BONUS key on the appropriate team's keypad when a team has reached a bonus situation.

Track Bonus:
- The controller will keep track of team fouls and automatically indicate when a team has reached a bonus situation.

Track Double:
- The controller will keep track of team fouls and automatically indicate when a team has reached a double bonus situation.

Timeout Clock:

When the **TIMEOUT** key is pressed the operator will have the choice of using TIMEOUT 1 or TIMEOUT 2. The length for TIMEOUT 1 and TIMEOUT 2 are preset by the operator in the option menu using the procedure below.

To set the length of a timeout; do the following:

- Enter the option menu by pressing **RESET** followed by **OPTION**.

- At the flashing **<SELECT GAME>** prompt use the up or down arrow key to select **<TIMEOUT CLOCK>** or **<TIMEOUT 2 CLOCK>** and press **ENTER**.

- At the prompt, enter the desired length of the timeout using the number keys then press **ENTER**. Example: To enter a time of 2 minutes, press 0, 2, 0, 0, then **ENTER**.

- To exit the option menu press **OPTION**.

- To start the timeout clock you must stop the game clock and press the **TIMEOUT** key. When prompted to "Select Timeout," press **ENTER** to use TIMEOUT 1 or use the up or down arrow key to select *TIMEOUT 2* and press **ENTER** to use the preset time for TIMEOUT 2.

- To stop the timeout clock before it expires, press the **TIMEOUT** key.

- To display the time remaining in a timeout on the scoreboard's game clock:

- Enter the option menu by pressing **RESET** followed by **OPTION**.

- Use the up and down arrow keys to select **<TIMEOUT DISP>** and press **ENTER**.
- Press the up or down arrow key once to turn the function *ON*.
- To exit the option menu, press **OPTION**.

Time Outs Left:

- To decrement the number of time outs left, press the **T.O.L** key on the **HOMESCORE** or **GUEST SCORE** keypad. The prompt should display the time outs left for the team selected decreased by one. Press the **ENTER** key to accept the change and decrement.
- To enter a desired number for time outs left, press the **T.O.L** key on the **HOMESCORE** or **GUEST SCORE** keypad. The prompt should display the time

outs left for the team selected decreased by one. At the prompt use the numeric keypad to enter the number of time outs left, then press **ENTER**.

Time of Day Function (T.O.D.):
The **<TIME OF DAY>** function in the **BASKETBALL**, **VOLLEYBALL**, and **WRESTLING** option menus will display the time of day on the controller's LCD and the scoreboard clock but disables all scoring functions. To set the time of day using the **<TIME OF DAY>** function do the following:

Make sure the controller is in **BASKETBALL**, **VOLLEYBALL**, or **WRESTLING** mode. If it is not, to the **USING THE OPTIONS MENU/CHANGING GAME MODES** section of this manual.

- Enter the option menu by pressing **RESET** quickly followed by **OPTION**.
- At the **<SELECT GAME>** prompt, use either the up or down arrow key to select **<TIME OF DAY>** and press **ENTER**.
- At the prompt, use the numeric keypad to enter the time of day, in a 4-digit format; then press **ENTER**.
    Example, to enter 8:03, press 0, 8, 0, 3, then press **ENTER**. To enter 11:52, press 1, 1, 5, 2, then press **ENTER**.

SCORING A GAME

Make sure the BASKETBALL inserts are in the controller and that it is in basketball mode. The game mode is displayed after the controller is turned on and either the **RESET** or **ENTER** button is pressed. If it is not in basketball mode, refer to the **OPTIONS MENU/Changing Game Modes** section of this manual.

Scoring:
To increase the *HOME* score by one (1), two (2), or three (3), press the appropriate key (**+1**, **+2**, or **+3**) on the **HOME SCORE** keypad.
- To decrease the *HOME* score by one (1), press the **-1** key on the **HOME SCORE** keypad.
- To increase the G*UEST* score by one (1), two (2), or three (3), press the appropriate key (**+1**, **+2**, or **+3**) on the **GUEST SCORE** keypad.
- To decrease the G*UEST* score by one (1), press the **-1** key on the **GUEST SCORE** keypad.

Period:
- To increase the *PERIOD* by one (1), press the **PERIOD** key.

Possession:
- To change the possession arrow from *HOME* to *GUEST* and vice versa, press the **POSS.** key.

Manual Bonus:
- When a team reaches a bonus situation, press the BONUS key on that team's keypad.
- A second press of the **BONUS** key will show a double bonus situation.
- A third press of the **BONUS** key clears the bonus indicator.

OPTIONS

SET T.O.D. CLOCK (Time Of Day)	Displays the time of day on the scoreboard's clock – disables scoring mode.	12-hour clock	Numeric keypad
SET GAME CLOCK	Sets the default game time and stores new time in memory until changed.	00:00 to 99:59	Numeric keypad
0.1 SEC ENABLE	Displays tenths of a second on the game clock during the last minute of a game.	ON or OFF	Up/Down Arrows
SET AUTO HORN	Automatically sounds the scoreboard's horn when the game clock expires.	ON or OFF	Up/Down Arrows
SET SHOT CLOCK	Sets the default shot clock time – remains in memory until changed.	1 to 59 seconds	Numeric keypad
TIMEOUT CLOCK	Sets the default length of the 1$_{st}$ preset timeout period – stored in memory until changed	00:00 to 59:59	Numeric keypad
TIMEOUT2 CLOCK	Sets the default length of the 2$_{nd}$ preset timeout period – stored in memory until changed.	00:00 to 59:59	Numeric keypad
TIMEOUT DISP	Displays the time remaining in a timeout on the Game clock when the TIMEOUT key is pressed.	ON or OFF	Up/Down Arrows
TIMEOUT ALARM	Automatically sounds the scoreboard's horn when a timeout expires	ON or OFF	Up/Down Arrows
PERIODS/GAME	Sets game periods as four (4) quarters or two (2) halves	4 quarters/2 halves	Up/Down Arrows
TEAM TIMEOUTS	Sets the default opening number of team timeouts	1 to 9	Numeric keypad
RESET TIMEOUTS	Determines whether team timeouts are reset at the start of each half	ON or OFF	Up/Down Arrows
RESET FOULS	Sets whether or not TEAM fouls are reset at the start of each half	ON or OFF	Up/Down Arrows
TEAM FOULS	Displays total team fouls for both teams	ON or OFF	Up/Down Arrows
MAX TEAM FOULS	Sets the maximum number of team fouls to be displayed on the scoreboard	0 to 99	Numeric keypad
BONUS TRACKING	Sets the kind of bonus tracking to use.	Track Bonus Track Double Bonus Manual Bonus Manual Double Bonus	Up/Down Arrows
BONUS FOULS	Allows the operator to set the default number of team fouls at which BONUS occurs	0 to 99	Numeric keypad
DOUBLE BONUS	Allows the operator to set the default number of team fouls at which DOUBLE BONUS occurs	0 to 99	Numeric keypad
GOAL LT PERIOD	Automatically lights the optional goal lights at the end of each period	ON or OFF	Up/Down Arrows
GOAL LT SHTCLK	Automatically lights the optional goal lights when the shot clock expires	ON or OFF	Up/Down Arrows

GOAL LT HORN	Automatically lights the optional goal lights when the horn is sounded (manually or automatically)	ON or OFF	Up/Down Arrows
GOAL LT STROBE	Sets the speed of the optional strobe light when the horn is sounded	OFF – VERY FAST	Up/Down Arrows
SET BRIGHTNESS	Set the brightness of the backlight of the LCD display	1 to 10	Up/Down Arrows

If at the end of a game the scoreboard is to be used to score another game, press and hold the **RESET** key for three seconds. All scoring information on both the controller's LCD and the scoreboard will be cleared, while all option settings will be saved. After the last game simply turn the controller's **POWER** switch *OFF.* All scoring information and option settings will be saved and may be retrieved when the controller is turned back on by pressing **ENTER**.

Shortly after the controller is turned off the *PERIOD/INNING* digit on the scoreboard will begin to flash and will continue to do so until power to the scoreboard has been shut off at the scoreboard's power disconnect switch or circuit breaker.
NOTE: *AFTER EACH USE POWER TO THE SCOREBOARD MUST BE SHUT OFF AT THE SCOREBOARD'S POWER DISCONNECT SWITCH OR CIRCUIT BREAKER. FAILURE TO DO SO WILL RESULT IN UNNECESSARY POWER CONSUMPTION AND MAY SHORTEN THE LIFE OF THE DISPLAYS AND ELECTRONICS.*

NOTICE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.