

CAMMEGH

The World's Finest Roulette Wheel

Billboard Display System Software User Guide

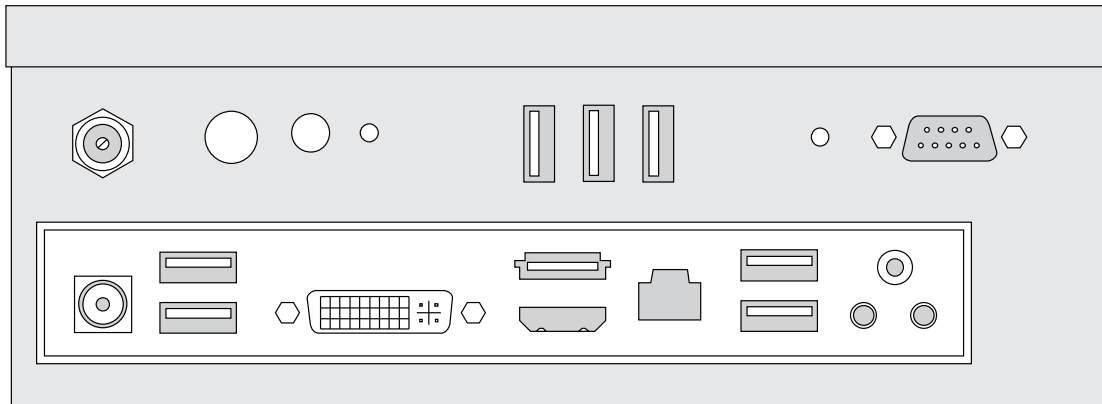
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Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if no 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.

Changes or modifications not expressly approved by the manufacturer may void the user's authority to operate the equipment.

Billboard Controller Connectors and Operation

Power Socket 1	Power Button	Reset Button	Hard Disk LED	USB	Serial Port Status LED	RS232 Serial Port
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Power Socket 2	USB 3.0	DVI-I	eSATA HDMI	RJ45 Ethernet	USB 2.0	Line Out	Mic In
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Power Sockets

Power sockets 1 and 2 provide two different ways to get power into the Billboard. Power must be 19V or 19.5V DC at 3A (60W) minimum. **Only one socket must be connected at any time.** Socket 1 is a lockable socket and is for use with the supplied PSU. Socket 1 can also be used with many standard laptop power supplies with a 2.5mm barrel connector, e.g. Toshiba. The centre pin is positive. Socket 2 is a Dell-type socket which can be used with any Dell laptop power supply.

Power & Reset Buttons

The power button is a momentary switch. Press briefly to power on the Billboard, and press briefly to start the shut-down sequence (this switches off the Billboard software and then shuts down the machine). The button glows red when power is available but the Billboard is not switched on. The button glows blue when the Billboard is on. If the Billboard becomes unresponsive, it can be switched off by holding the power button for 4 seconds or restarted by pressing the reset button (not recommended). **Always switch off the Billboard using the main power button when possible. Using the reset button or holding the power button for 4 seconds can cause the Billboard to lose configuration changes and may corrupt the software.**

Serial Port & LED

The RS232 socket is standard PC pin out and can be connected to Cammegh Mercury or Cammegh Slingshot wheels with a null modem cable. The Serial Port Status LED indicates whether any data is received by the serial port and works independently of whether the software is operating. It glows green if it receives an understood protocol, red if it receives a protocol which it cannot understand, and is off if it receives nothing.

Introduction

1. At its most basic, the Billboard Display System comprises a Billboard controller connected to one or more LCD displays. The mounting assembly varies from order to order, but typically consists of a display stand and either one or two LCD displays for each Billboard.
2. The Billboard controller can receive data from the roulette wheel in one of three ways:
 - By serial connection to the wheel's controller (for Cammegh wheels with In-Rim sensors)
 - By USB connection to the Cammegh EyeBall camera (for any wheel), if licensed to do so.
 - By serial or Ethernet connection to another source of Cammegh or approved 3rd party protocol.
3. The Billboard controller can send data to a 3rd party system (e.g. betting terminals) through the Ethernet Serial port, if licensed to do so.
4. The Billboard controller can record and store an indefinite number of game results, either locally or to a network location for use in management software such as Cammegh PitBoss.

Installation Location

The Billboard can be fixed to the back of a monitor with 100mm-spaced VESA mounting points or any surface which is amenable to wood screws, such as the underside of a desk or wall of a cabinet, using the supplied mounting plate. It can be mounted in any orientation, providing the ventilation holes are not obscured. When selecting a site, ensure that that it is as dust-free (away from carpet and baize surfaces) and as well ventilated as possible. Do not install it in an enclosed area or near any heat source. Do not operate in air temperatures exceeding 40 C (including any temperature rise due to the Billboard's operation). The Billboard contains environmental logging hardware and operation in hostile conditions may affect warranty.

Fixing to a Wooden Surface

Screw the mounting plate (with the raised plate and thumbscrew on the side opposite to the side that you wish the connectors to be on) to the mounting surface using 4 number 8 wood screws. Slide the Billboard (with the connector side away from the thumbscrew plate) on to the mounting bolts so that all 4 keyhole slots in the underside of the Billboard engage, and push the Billboard against the raised plate. Screw the thumbscrew on the raised plate into the threaded hole in the face opposite to the connector face. Check that the Billboard is attached securely.

Fixing to a Monitor

This method of fixing is not currently needed in any Cammegh products, but has been designed in as an option and is useful for configuring and demonstrating Billboards. If you have a monitor which has 100mm VESA mounting points on the rear (M4 tapped holes on a 100mm grid), such as a Cammegh standard monitor, then you can unscrew the double-headed VESA mounting bolts from the supplied mounting plate, and screw them into four holes on the back of the monitor. The Billboard can then be hung on the back of the monitor using the keyhole slots, normally with the connector face downwards.

IMPORTANT NOTE:

Please **DO NOT TAMPER** with the internal workings of the Billboard computer unless you have been given the all clear by Cammegh Ltd. The Billboard licensing is sensitive to hardware changes, meaning a license may be invalidated if unauthorised modifications (e.g. graphics card replacements) are performed. If a problem arises, contact Cammegh Ltd before performing any maintenance yourself.

Tampering with the Billboard hardware without appropriate approval **WILL VOID THE WARRANTY** of the Billboard computer and we cannot be held responsible for any subsequent damage caused.

Billboard Computer Operation

Start-up and Shutdown

1. Switch on the LCD display(s) first. The display power switch is located on the underside of the unit.
2. Push the larger of the two rounded buttons on the front of the Billboard computer to switch it on. This button will also initiate a safe shutdown while the Billboard is running.
3. The Billboard computer is provided with Microsoft Windows installed. The following user accounts have been set up:

Username: "Billboard", password: "billboard"

Username: "Administrator", password: "cammegh_letmein"

The "Billboard" user will be automatically logged on when the Billboard computer starts up. You should only log in to the "Administrator" user area if instructed by Cammegh Ltd.

4. The Billboard software will start automatically when the "Billboard" user logs in.
5. To safely switch off the Billboard computer, push the larger of the two rounded buttons on the front of the case again. This will close the Billboard software, shut down Windows and switch off the computer.

Billboard Software Introduction

1. The Billboard software receives its game data from the wheel controller or EyeBall camera. This data includes the game state and winning numbers, both of which are used to display graphics and animations on the LCD displays.
2. The Billboard can be configured using the on-screen menu. To open this menu, press 'Enter' on the number keypad.
3. The Billboard software displays information on the LCD displays in a number of zones. Pre-configured layouts with different zone arrangements can be accessed through the menu.
4. Roulette table information, such as Table Name, currency and Minimum/Maximum Bet, can be configured through the menu.
5. Dealer names can be changed by entering a PIN (Personal Identification Number) using the number keypad. This provides a simple and fast method of changing the Dealer Name displayed on the Billboard.
6. All statistical data as and Billboard settings will be retained when the Billboard computer is switched off.

Billboard Software Menu

1. To open the software menu, press 'Enter' on the number keypad. Navigate up and down through the menu options by pressing the 'up' and 'down' arrows and select options using 'Enter'. Menu options are listed and described below.
2. **(MENU) Select Layout**
If your order includes multiple layouts, they will be listed when you select this menu option. Layouts control the appearance and coordinates of elements that are displayed on the screen. When you change layouts, allow up to ten seconds for the display to refresh.
3. **(MENU) Call Attendant**

- Causes the header of the billboard to flash. Stop the header flashing by selecting this option again.
4. (MENU) **Table Set-up**
Provides access to the options below.
 5. (MENU) Table Set-up > **Table Name**
Allows the table name to be changed. The table name appears in the header with most layouts. Use '← Backspace' to delete and press 'Enter' to save the new value. You must have a keyboard plugged into the Billboard computer in order to enter new characters.
 6. (MENU) Table Set-up > **Min/Max Bet**
Provides access to the options below.
 7. (MENU) Table Set-Up > Min/Max Bet > **Minimum Bet**
Allows the minimum bet value to be changed. This value appears in the header with most layouts. Use '← Backspace' to delete and press 'Enter' to save the new value.
 8. (MENU) Table Set-Up > Min/Max Bet > **Maximum Bet**
Allows the maximum bet value to be changed. This value appears in the header with most layouts. Use '← Backspace' to delete and press 'Enter' to save the new value.
 9. (MENU) Table Set-up > **Statistics Length**
Allows the statistics length value to be changed. This value is used as the number of historical games from which the Billboard statistics (Odd/Even numbers, Red/Black numbers, etc.) are calculated. Use '← Backspace' to delete and press 'Enter' to save the new value.
 10. (MENU) Table Set-up > **Currency**
Lists currency options. Selecting one of these options will cause the currency symbols (€, £, \$) to be changed in the header. For some currencies, a dedicated layout might be provided, in which case, this menu option will have no effect.
 11. (MENU) Table Set-up > **Reset Statistics**
Clears all winning results from the number stack on the screen. This will not affect saved game logs.
 12. (MENU) Table Set-up > **Screen Text**
Allows any editable on-screen text to be changed. Select the on-screen text to be changed and press 'Enter' to edit. Your Billboard may not use editable text if this feature was not requested.
 13. (MENU) Table Set-up > **Main Menu**
Returns you to the Main Menu.
 14. (MENU) **Close Table**
Switches the Billboard to 'Table Closed' layout, extending the lifespan of the LCD displays.
To return to a previous layout from the 'Table Closed' layout, select 'Open Table' from the Main Menu.
 15. (MENU) **Switch Off**
Saves all settings and exits the Billboard software to Windows. You can also exit the software using the key combination 'Alt' + 'F4', but this way, settings will not be saved.
To start the Billboard software, double-click on the 'Run Billboard' icon, located on the Windows Desktop. The software will also start automatically if you restart the Billboard computer.
 16. (MENU) **Test Mode**

Activates 'test mode'. While active, the results of any games played will be stored only temporarily and erased once test mode is deactivated. Test mode will remain active until deactivated by selecting 'Normal Mode' from the menu.

17. (MENU) **Pay Table**

Selects a pay table from available files as sourced by the config file. Your Billboard may not use editable pay table files if this feature was not requested.

18. (MENU) **Exit Menu**

Closes the menu.

Scrolling Text Footers

1. Some Billboard layouts draw a scrolling text message across the screen. This message is sourced directly from two text files on the Windows Desktop, both of which can be edited and saved to change the message content.
2. To change the message for a regular layout, exit the Billboard software using 'Switch Off' in the menu and open the file 'Messages.txt' on the Windows Desktop. To change the message for a 'Table Closed' layout, open 'Table Closed.txt'
3. With a keyboard plugged into the Billboard computer, these text file can be edited and saved. When you next start the Billboard software, the amended messages will be displayed.

Dealer Names

1. The dealer names (usually appearing in the software header, if requested) are sourced directly from a text file on the Windows Desktop, which can be edited to change the names which appear. Dealers can be changed within the Billboard software using the number keypad by typing '*' followed by the dealer PIN.
2. To amend the list of dealer names, exit the Billboard software using 'Switch Off' in the menu and open the file 'Dealers.txt' on the Windows Desktop. Dealers must be entered in the following format:

001 Isaac

Each name must be preceded by a unique 3-digit PIN and a space. With a keyboard plugged into the Billboard computer, this text file can be edited and saved.

3. Within the Billboard software, switch between dealer names by typing '*' on the number keypad, followed by the PIN of the desired dealer.

Manual Overrides

1. The Billboard software allows winning numbers to be entered and removed manually using the number keypad. This could become necessary if an inaccurate winning result is returned or a game is voided.
2. To add a number manually, type the plus symbol (+) on the number keypad, followed by the desired number (00 – 37, with '37' representing double-zero). Note: the number must be two digits, e.g. '09' instead of '9'.
3. To remove the last number manually, press the minus symbol (-) on the number keypad.
4. To manually invoke 'No More Bets', press the divide symbol (/) on the number keypad.

Frequently Ask Questions

- Q. The screen does not turn on.

- A. Ensure the screen connections are sound. Ensure that the screen's power switch is in the 'on (I)' position. If the screen power adaptor has an LED light, check to see if it is lit – if not, this indicates a problem with either the power supply or the adaptor. If possible, try swapping the adaptor with another one to determine whether the adaptor, screen or power supply is at fault. Cammegh Ltd will be happy to replace any faulty component.
- Q. The screen turns on, but displays 'NO SIGNAL'.
- A. In some units, this can be caused by the Billboard computer being switched on before the screen. Try restarting the Billboard computer, using the smaller of the two rounded buttons on the front of the case. Ensure all screen connections are sound. If the unit is double-sided, ensure BOTH screens are plugged into the DVI splitter. If possible, try swapping the Billboard computer with another one to determine whether the Billboard computer or screen is at fault.
- Q. Screen starts White and mentions a NVIDIA / Direct 3D reference rasterizer error and then exits the application.
- A. On the Windows Desktop, check the resolution of the screen by right clicking on the desktop and selecting 'properties'. The resolution should match the one specified by the 'VIDEO_MODE' command in the config files within 'C:\Media'. Resolutions of 1600 x 1200 or 1920 x 1200 are the standard, but some custom layouts may require other resolutions.
- Q. The Billboard software does not start.
- A. If this problem persists even after opening 'Run Billboard' on the Windows Desktop, it is likely caused by an invalid license. Licences can be invalidated by unexpected hardware changes or by errors in the factory settings. Contact Cammegh Ltd and a replacement one will be sent to you. The process of relicensing a Billboard may take a couple of days, depending on local time differences.
- Q. Unwanted characters appear in the software header.
- A. Delete the file 'Windata.dat' from 'C:\Media'. This file stores temporary information about the Billboard and is rewritten every time the software starts. If it has become corrupt, deleting it will refresh the statistics and erase any problems.

If you experience any problems not listed here, please contact Cammegh Ltd for support.

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