

December 2008

Liquor Guardian Setup Manual

Before beginning, check that the dispenser's two keylocks:

Power Keylock on front panel is OFF (turn fully counter clockwise)

Manager Key on side panel is On (turn fully clockwise)

*The following 12 Menus will appear on the dispenser's display sequentially, each showing for about two seconds. However, not all of the menus will appear if they have been disabled. See **Manager Key Setup Menu** in the **Main RS232 Menu** to control which Key Menus are allowed to appear.*

*Picture of **Up** arrow **Down** arrow **Square** and **Round** buttons that are referred to throughout this manual.*



The meaning of RED, BLU, GRN and YEL as seen on many of the dispenser's screens.

RED = Red size light = Up Arrow portion size = .50 oz (factory settings)

BLU = Blue size light = Down Arrow portion size = .33 oz

GRN = Green size light = Regular or default portion = 1.00 oz

YEL = Yellow size light = Round portion or cocktail = 2.00 oz

Key 1: Current Grand Total

*The Current Grand total is the cash sum of all liquor dispensed. Pressing **Key 1** will display this total for 10 seconds before returning to normal operation.*

Example Screen

ALL SALES TOTAL
\$ 1391.45

Key 2: X REPORT Current Totals

*An "X" Report is a more detailed accounting of pours, it includes oz pour totals, and counts for all four portion sizes. It shows the totals as of the moment **Key 2** is pressed.*

Example Screen

142.3 oz VODKA
GRN 138.5 oz

< Total of all Vodka dispensed *including* the amount used in making cocktails
< Total dispensed by green size only

Pressing **up** or **down arrows** will show the portion counts and volumes that make up the brand total on the top line of the display.

Pressing a **liquor key** will change the totals to the brand pressed.

The **round size button** returns to normal operation

If there is a 3 inch receipt printer connected to the dispenser's RS232 connector, then a detailed report of all sales will be printed.

NOW PRINTING..

< Dispenser is sending data to the receipt printer
(Setup your printer to 9600 baud, 8, N, 1, XON/XOFF Handshake)

If your printer is not printing, try turning the **Power Keylock** on, this will cause the dispenser to check it's RS232 connection for a receipt printer. If one is found, the display will show **PRINTER FOUND** for a few seconds.

If the factory selection pour counts, ounce totals and cash totals is not suitable, **Key 12** controls what is or isn't printed in these paper reports.

Key 3: Z Report
Previous Totals

A Z Report is a previous X report, whenever a Reset occurs the current X totals are saved as a Z report. The last seven Z reports are available for review or printing.

Z Report 01
Reset By:
Keylock

< Z report number 01, report number are sequential from 00 to 99
< How the reset was performed, by keylock, network or timer

After a few seconds the bottom display line will begin to scroll sideways to display the various key options at this prompt.

Key 1 selects the most recent report

Key 2 select the 2nd oldest report

Key 3 select the 3rd oldest report

- Key 4 select the 4th oldest report
- Key 5 select the 5th oldest report
- Key 6 select the 6th oldest report
- Key 7 select the oldest report

Keys 1 to 7 prints or displays the Z report selected

The round size button returns to normal operation

Follow the instructions above, for X reports as they are the same for Z reports after a report selection is made.

**Key 4: Reset
& File Z Report**

Key 4 will save the current totals and save them as the most recent Z report. The current X totals will then be cleared. Key 4 will not appear if the totals are already reset, it will reappear after the first dispense.

**Key 1: Abort
Key 3: Continue**

- < Cancels reset if Key 4 was pressed by mistake
- < Continue with the totals reset

**TOTALS RESET
& Z REPORT FILED**

After pressing Key 3 this will appear, the previous X totals will appear as the most recent Z report, and all X totals are zeroed.

**Key 5: Adjust
Portion Sizes**

When pouring, all Liquor keys can have up to four different portion sizes or three portion sizes and a cocktail. These portion sizes are adjusted with this menu.

Factory portion sizes are:

RED .50 oz (Up Arrow)

BLU .33 oz (Down Arrow)

GRN 1.0 oz Regular size, the size poured if no size selected.

YEL 2.0 oz (Round) or Cocktail if programmed

**Pick Size (Up,Down,Square,Round)
.5 oz (UP) RED**

- < Press the size key you want to adjust.
- < Display sequences through all four portion sizes

.50 oz RED Size

Key (UP) To Increase

- < Displays portion size you selected
- < Sideways scrolling of key options for this prompt.

Pressing the **up arrow key** increases the portion size by 0.01 oz. Pressing and holding the key will increase the size rapidly.

Pressing the **down arrow key** decreases the portion size by .01 oz. Pressing and holding the key will decrease the size rapidly.

Holding the key until it is zero will disable that portion size on all liquors.
Do NOT zero the GRN (regular size), it is used to calibrate the other sizes.
To completely disable a liquor key, see **Key 7**

The **square key** saves the changes and prompts to adjust another portion size

The **round key** recalibrates all the liquors for the new portion size and then exits back to normal operation.

Key 6: Adjust Calibration

This key corrects over or under pouring with a simple time adjustment and can put the dispenser into "Purge Mode" to aid in removing air from the liquor lines during filling .

(Up) PURGE AIR MODE
(Down) CALIBRATION

- < For removing air from liquor lines
- < For adjusting the the pour accuracy

Selecting the **Up key** displays, **turn the power keylock ON before purging.**

PURGE AIR MODE
Use (Up,Down,Square,Round) to Quit

- < Press and hold any liquor key to purge
- < Pressing any size key quits purge mode

Selecting the **Down key** displays

Pick Liquor Key To Calibrate

- < Press the liquor key you want to calibrate
- < Changes to show each key's brand in rotation

(round) is an abort key (restarts the dispenser)

After selecting a liquor key the displays changes to

**1.020 s Vodka
Please Turn On**

- < Displays current pour time in seconds and the Brand being calibrated
- < Displays “Please Turn Power Keylock ON”, so test pours can be made.

Pressing the up arrow key increases the pour time by 0.001 second. Pressing and holding this key will increase the pour time rapidly.

Pressing the down arrow key decreases the pour time by 0.001 second. Pressing and holding this key will decrease the pour time rapidly.

Pressing the selected liquor key will dispense a GRN (regular portion) of that brand, check the volume poured with a shot glass or graduated cylinder.

If, for example, the pour was 10 % under, then increase the pour time by 10 % to compensate.

Likewise, if the pour was 10 % too much, decrease the pour time by 10 % to compensate.

The square key prompts you to calibrate another liquor.

Round key automatically recalibrates the other three portion sizes based on the GRN size and then exits back to normal operation.

**Key 7: Bar and
Brand Name**

After the liquor lines have been connected, the factory “Valve 01” brand name should be changed to what liquor it actually is. A selection of common brand names are offered or a custom name may be typed using the wand keys.

**(Up) Brand Names
(Down) Bar's Name**

< Press the (up) key to change the brand names of the liquor keys

< Press the (down) key to change the bar's name or location.

In multiple bar setups its important to identify each bar by it's name or location. A selection of common bar names and locations are offered or a custom name may be typed using the wand keys.

Renaming the Brands

Pick Liquor Key Key 1:Valve 01

- < Press the liquor key (Valve) you want to rename
- < Display sequences through each key and it's current brand name or valve number (**round**) is an abort key (restarts the dispenser)

(Up) Create Name (Down) Pick from List

- < Type a custom label using the wand's keys
- < Select new name from a list of common brand names.

Renaming a Key from the brand list

Absolut Key (up) for Next

- < A brand name from the list, press the **round button** to rename key and exit.
- < Press the **Up button** to display the next brand name and the **down button** to back up a name. Pressing and holding will rapidly show the names

Press the **square button** to use the name displayed and then continue renaming liquor keys.

To completely disable a liquor key select "**KEY DISABLED**" for a name. This label is one label down from "**Absolut**". The rest of brand list is in alphabetical order.

Dispenser's Common Brand Label List

KEY DISABLED	Beefeaters	J+B	Sambucca
Absolut	Blk Velvet	JW Black	Sauza Tequila
Amaretto	Bushmills	JW Red	Seagrams Seven
Baileys	C.B. Brandy	Jack Daniels	Silent Sam
Bar Bourbon	Cacao	Jameson	Smirnoff
Bar Brandy	Can. Whiskey	Jim Beam	Southern Comfort
Bar Coff. Liqu.	Canadian Club	Kahlua	Tanqueray
Bar Dark Rum	Cider	Lambs Rum	Tia Maria
Bar Gin	Courvoisier	Lemon Hart	Triple Sec
Bar Rye	Crm. de Menthe	Malibu	V.O.
Bar Scotch	Crown Royal	Old Crow	VAT Rum
Bar Tequila	Cuervo	Paralyzer	Vodka
Bar Vodka	Dark Rum	Pepper. Schnapp	Vodka/Kahula
Bar Whiskey	House Wine	Red Wine	White Rum
Bar White Rum	Irish Cream	Rum	White Wine
Barcardi	Irish Whiskey	Russian	Wisers

Creating a custom name using the wand keys

**Valve 01
(Up) (down) Scans A-Z a**

< The underlined letter (V), indicates the letter that can be changed
< Display shows size key options, listed below.

Up button , advances underlined letter to the next letter in alphabet

Down button, backup to previous letter in alphabet or number

Square button, moves cursor (underlined letter) to the right one place

Round button, saves changes and exit.

Any Liquor Key, moves the cursor to the left one place

Holding either the **Up** or **Down** buttons will start fast scrolling of letters

Renaming the Bar

**(Up) Create Name
(Down) Pick from List**

< Do custom name, see “**Creating a custom name using the wand keys**”
< Select name from Common Barname List

Renaming a bar from the Barname List

**Lounge Bar
Key (up) for Next**

< A barname from the list, press the **round button** to give the bar this name.
< Press the **up button** to display the next bar name and the **down button** to back up to the previous name. Pressing and holding will rapidly show the names

Dispenser's Common Barname List

Dancers Bar	Show Room North	Gun 3	Gaming Bar 3
Northside Bar	Show Room East	Gun 4	Gaming Bar 4
Southside Bar	Show Room South	Gun 5	Banquet Room
Sports Bar	Show Room West	Gun 6	North Bar
Night Club	Dining Bar	Patio Bar 1	East Bar
Sports Bar North	Dining Waiting	Patio Bar 2	South Bar
Sports Bar East	Dining North	Patio Bar 3	West Bar
Sports Bar South	Dining East	Gaming Area	VIP Room
Sports Bar West	Dining South	North Patio Bar	Poolside Bar
Leftside Bar	Dining West	East Patio Bar	Banquet Room
Rightside Bar	Portable Bar 1	South Patio Bar	Main Bar
Slots Bar	Portable Bar 2	West Patio Bar	Show Room
Card Tables Bar	Portable Bar 3	Garden Left	Shooter Bar

Craps Bar
Keno Bar
Roulette Bar

Portable Bar 4
Gun 1
Gun 2

Garden Right
Gaming Bar 1
Gaming Bar 2

Lounge Bar
Holding Area Bar
Pub

Key 8: Set Clocks

The dispenser has three internal clocks, the first is the timestamp, it provides the date and time for sales reports, the second is the operating hours timer, it controls when the dispenser's operating hours, the third is the reset timer, it saves "Z" reports and clears the sales totals daily on a daily basis. *If the dispenser is connected to a network, setting of the dispenser's clocks is not needed as the network host will set all the clocks.*

(Up) Set Date/ Time (Down) Set Timers

< Pressing the (Up) key adjusts the year, month, date, day of week and time.
< Press the (Down) key to adjust the Operating hours Timelock or Reset timer

Adjusting the date and time

All hours are 00 to 23 hours, to convert AM/PM time to 24 Hr time add 12 to any PM time and use 00 hour for 12 AM. The rest (01 to 11) of AM time is the same in 24 Hr time.

09
(Up) (Down) Year (Square) Next

< Press the (Up) key to increase the year
< Press the (Down) key to decrease the year
When correct press the (Square) button to continue

January
(Up) (Down) Month (Square) Next

< Press the (Up) key to the next month
< Press the (Down) key to the previous month
When correct press the (Square) button to continue

15
(Up) (Down) Date (Square) Next

< Press the (Up) key to increase the date (1 to 31)
< Press the (Down) key to decrease the date
When correct press the (Square) button to continue

Friday
(Up) (Down) Day (Square) Next

< Press the (Up) key to the next day of week
< Press the (Down) key to the previous day of week
When correct press the (Square) button to continue

14
(Up) (Down) Hour (Square) Next

< Press the (Up) key to increase the hour (00 to 23 hours)
< Press the (Down) key to decrease the hour
When correct press the (Square) button to continue

09
(Up) (Down) Minute (Square) Next

< Press the (Up) key to increase the minutes
< Press the (Down) key to decrease the minutes
When correct press the (Square) button to finish.

Adjusting the Operating hours and Reset timer

(Up) Set Reset Time
(Down) Set Timelock

- < Pressing the **(Up)** key adjusts when a sales reset will occur.
- < Press the **(Down)** key to adjust the dispenser's operating hours

Adjusting the Reset Timer

The reset timer is used to automatically save and clear the sales totals on a daily basis . The last seven “Z” Sales reports that can be reviewed at any time using **(Key 3)**. Set the reset to occur at a time that the bar is closed or very slow, 4:00 am is usually a good time. To disable (factory setting) the reset timer, adjust both the hour and minutes to zero.

Reset 03
(Up) (Down) Hour (Square) Next

- < Press the **(Up)** key to increase the Reset hour (24 hour time)
- < Press the **(Down)** key to decrease the hour
- When correct press the **(Square)** button to continue

Reset 59
(Up) (Down) Minute (Square) Next

- < Press the **(Up)** key to increase the Reset minute.
- < Press the **(Down)** key to decrease the minute
- When correct press the **(Square)** button to finish.

Adjusting the Operating Hours Timelock

To disable (factory setting) the Timelock, adjust both the hour and minutes to zero of the opening and closing times.

Opening 13
(Up) (Down) Hour (Square) Next

- < Press the **(Up)** key to increase the opening hour
- < Press the **(Down)** key to decrease the hour
- When correct press the **(Square)** button to continue

Opening 55
(Up) (Down) Minute (Square) Next

- < Press the **(Up)** key to increase the opening minutes
- < Press the **(Down)** key to decrease the minutes
- When correct press the **(Square)** button to continue

Closing 02
(Up) (Down) Hour (Square) Next

- < Press the **(Up)** key to increase the closing hour (24 hour time)
- < Press the **(Down)** key to decrease the hour
- When correct press the **(Square)** button to continue

Closing 05
(Up) (Down) Minute (Square) Next

- < Press the **(Up)** key to increase the closing minutes
 - < Press the **(Down)** key to decrease the minutes
 - When correct press the **(Square)** button to finish.
-

Key 9: Cocktail Recipes

The **round key** on the wand can be setup as the fourth portion size or as a cocktail. This key provides the means to create an up to an eight ingredient cocktail. A cocktail needs to know which liquor key is used to pour this cocktail and it needs the recipe for the drink. A recipe may have up to eight ingredients, each with an amount of up to 9.9 oz.

Pick Key To Use for Cocktail

- < Press a liquor key to assign it for pouring this cocktail.
- < Display shows all existing cocktails and unused cocktails, select an unused key for a new cocktail or key an existing cocktail to adjust it.
(**round**) is an abort key (restarts the dispenser)

Pick Recipe Ingredient

- < Press the liquor key used for the cocktail's ingredient
- < Display rotates though all brands and their key numbers
(**round**) is an abort key (restarts the dispenser)

0.0 oz Vodka Key (up) to Incr

- < Shows current recipe amount and the brand to pour.
- < Show all the wand key option for this prompt, they are listed below

“Key (**up**) to Increase Ingredient”, adds .1 oz each time it is pressed

“Key (**down**) to Decrease Ingredient”, subtracts .1 oz each time it is pressed

“Key (**square**) For Next Recipe Item”, when amount is correct, press to do next ingredient.

“Key (**round**) to Quit”, saves cocktail and exits. Your cocktail is now ready to pour by pressing the (**round**) key and then the **liquor key** that you assigned to pour it.

To remove a cocktail and restore the YEL portion size, change all the ingredient amounts to 0.0 for the cocktail you want to remove.

Key 10: Adjust Prices

Each of the portion sizes has a price assigned to it. These prices are used in X and Z reports calculations and in the Grand total displayed by Key 1. These prices are not used in PLU Interlocks, rung in prices are controlled entirely by the cash register.

Pick Liquor Key to Price

- < Press the liquor you want to adjust the price on.
- < Display shows all liquor keys in rotation
(**round**) is an abort key (restarts the dispenser)

Pick size (up,down,square,round) to Price

- < Press the size button to price it's portion.
- < Display shows current portions in rotation. Use (**square**) to price

the GRN (regular) size

**3.95 GRN Price
Key (up) to Incr**

- < Show current price of portion
- < Show all the wand key option for this prompt, they are listed below

- “Key (up) to Increase price”, adds .01 to the current price.
- “Key (down) to Decrease price”, subtracts .01 from the current price.
- “Key (square) to Do Another Size”, press to do another portion on the same liquor
- “Key (round) to Exit”, save changes and exit.
- “Hold (up) or (down) for Fast Scroll”, price will change rapidly while holding key down.

**Key 11: Adjust
PLU Interlock**

This dispenser can be setup to "ring in" each dispense to a cash register system for approval before pouring it. This key provides the needed adjustments to establish an "Interlocking Handshake" between the dispenser and the cash register system.

Interlocks work by the dispenser sending a unique PLU number for approval to the Cash Register system. The cash register in turn looks up the PLU number to see if it is valid, if it is not, it will be declined, if it is valid, then it will ring it in using the price, name and other data it has on file for that PLU number. The Cash register will then send back an "ACK" if approved and a "NAK" signal if declined. All this normally occurs in a fraction of a second and a pouring delay will not be noticed, but should the cash register get very busy, the response may be delayed enough to notice a pouring delay when dispensing.

**(Up) Interlock Mode
(Down) PLU Numbers**

- < See “Setting the PLU mode” below
- < Each liquor already has four different PLU numbers, one for each portion size. If the cash register system PLU numbers are not set up yet, then use the factory PLU numbers already setup within the dispenser.

The table below is the factory PLU numbers, if these can be used by the cash register system, then adjusting PLU numbers is not needed. If custom PLU numbers are required, see the next section.

FACTORY PLU CODES

Wand	Brand	RED Up	BLU Down	GRN Regular	YEL Round
Key 1:	Valve 01	11	12	13	14
Key 2:	Valve 02	21	22	23	24
Key 3:	Valve 03	31	32	33	34
Key 4:	Valve 04	41	42	43	44
Key 5:	Valve 05	51	52	53	54
Key 6:	Valve 06	61	62	63	64
Key 7:	Valve 07	71	72	73	74

Key 8: Valve 08	81	82	83	84
Key 9: Valve 09	91	92	93	94
Key 10: Valve 10	101	102	103	104
Key 11: Valve 11	111	112	113	114
Key 12: Valve 12	121	122	123	124

To calculate a factory PLU, multiply the liquor key number times 10 and add 1 for RED, add 2 for BLU , add 3 for GRN and add 4 for the YEL portion.

For example: GRN plu for Key 12 = $(12*10) + 3 = 123$

All PLU numbers must be in the range of 1 to 9999, a PLU of zero is invalid and bypasses the Interlock and allows pouring of that item if it has a non-zero portion size.

**Pick Liquor Key
To Adjust PLU**

- < Press the liquor key for the PLU you want to adjust.
- < Display shows all liquor keys in rotation
([round](#)) is an abort key (restarts the dispenser)

**Pick size (up,down,square,round)
to Adjust PLU**

- < Press the size button to adjust it's PLU.
- < Display shows current portions in rotation. Use ([square](#)) to set the GRN (regular) size PLU

**23 GRN PLU
Key (up) to Incr**

- < Show current PLU of portion size you selected
- < Show all the wand key options for this prompt, they are listed below.

“Key ([up](#)) to Increase PLU” , adds 1 to the current PLU.

“Key ([down](#)) to Decrease PLU” , subtracts 1 from the current PLU.

“Key ([square](#)) to Do Another Size” , press to do another portion size on the same liquor

“Key ([round](#)) to Exit” , save changes and exit.

“Hold ([up](#)) or ([down](#)) for fast Scroll” , PLU will change rapidly while holding key down.

If you have the Interlock turned on, and connected to the cash register, you may press [any liquor key](#) to test the PLU ring in, no liquor will pour but it should ring in or show an error message on the display for a few seconds.

Possible Error Messages...

**PLU 0012 Failed
PLU Host Timeout**

There was no response from the network PLU host
There is no dispenser making a direct connection to the cash register

**PLU 0012 Failed
POS DECLINED**

Cash register rejected PLU number sent. (rejected PLU 12)

Setup correct PLU in the Cash Register

**PLU 0012 Failed
POS TIMEOUT**

Direct RS232 connection failure, cash register failed to respond at all.

Setting the PLU mode

After everything else has been setup and the dispenser is pouring correctly, then the PLU Interlock can be turned on.

**INTERLOCK OFF
Use (up or down) to Scrol**

< Shows current Interlock mode.
< Show all the wand key options for this prompt, they are listed below.

“Use (up) or (down) to Scroll Options”, press (up) or (down) to view the next PLU mode.

“Key (round) to Exit”, return to normal operation.

“Key (square) to Select mode”, turn on mode shown on the top line of display.

“INTERLOCK OFF” , turns off any Interlock mode, allows pouring without Cash register.

“BERG 38400 8N1” , Use Berg protocol, dispenser's RS232 is connected directly to Cash register. Use 38400 Baud , 8 bit, No parity, One stop bit and no hardware handshake connections.

“MICROS 38400 8N1” , Use Micros protocol, dispenser's RS232 is connected directly to Cash register. Use 38400 Baud , 8 bit, No parity, One stop bit and no hardware handshake connections.

“BERG NETWORKED”, Use Berg protocol, this dispenser is not connected to cash register, another dispenser has the direct connection, interlock is though a network connection

“MICROS NETWORKED”, Use Micros protocol, this dispenser is not connected to cash register, another dispenser has the direct connection, interlock is though a network connection

**Key 12: Adjust
Roll Printer**

If a three inch paper roll printer is connected to the dispenser's 9 pin RS232 connector. X and Z report can then be printed on paper. Due to the limits of the three inch paper width, not all of the data will fit across the paper, this key selects which data is printed or skipped over.

The pressing the (up) or (down) buttons will step the top display line through the

seven printing options, press the (square) button to toggle an option, pressing the (round) button saves any changes and exits back to normal operation. Printing options are shown at factory settings.

Skip Sizes

< Skip showing portion sizes in X and Z reports
Pressing (square) will toggle Skip Sizes to Print Sizes

Print Counts

< Each portion size has a counter that tracks how many times it has been dispensed.
Pressing (square) will toggle Print Counts to Skip Counts

Skip Metric

< Liquor dispensing totals can be shown in liters and mL
Pressing (square) will toggle Skip Metric to Print Metric

Print Ounces

< Liquor dispensing totals can be shown in ounces
Pressing (square) will toggle Print Ounces to Skip Ounces

Skip Prices

< Skip over the price per portion in reports
Pressing (square) will toggle Skip Prices to Print Prices

Print Cash

< Show the cash totals and subtotals
Pressing (square) will toggle Print Cash to Skip Cash

Skip No-Sales

< Liquors without any sales, are not printed in reports
Pressing (square) will toggle Skip No-Sales to Print No-Sales