By the Glass® Standard
User Manual

Wine Serving and Preservation System with Wine by the Card

TABLE OF CONTENTS

BEFORE USE - IMPORTANT SAFETY INFORMATION

1. What you need to Consider Before Commissioning..... 3
2. Notes on Handling Packaging Material..... 3
3. Technical Guidelines and Standards..... 3
4. Tips for the Setting-up Location..... 3
5. Electrical Connections..... 4
6. Condensate..... 5
7. Recommendations for Gas Use..... 5
8. Tips for Inserting Wine Bottles..... 5

SETTING-UP AND OPERATION

9. Commissioning..... 6
10. Connecting the Gas Supply..... 6
11. Adjusting and Regulating the Gas Pressure..... 8
12. Exchanging the Gas Cylinder..... 9
13. Thermostats and Separating the Temperature Zones..... 9
14. Adjusting and Regulating the Temperature..... 10
15. Connecting the Wine Bottles..... 11

BY THE GLASS® WINE BY THE CARD

16. The customer card management system Wine by the Card..... 12
17. Registration of newly connected bottles..... 13
18. Programming the dispensing volume (Calibration)..... 13
19. Programming of the prices (via the service menu „price“)..... 14
20. The back office software By the Glass® Wine Monitor (AES)..... 15
21. The card administration with By the Glass® C-Manager..... 18
22. By the Glass® Wine by the Card from the customer's point of view 20

CARE AND MAINTENANCE

23. Cleaning the Surfaces..... 21
24. Cleaning the Taps and Lines..... 21
25. Manual Defrost..... 22
26. Maintenance and Trouble-Shooting..... 22

BEFORE COMMISSIONING
IMPORTANT SAFETY INSTRUCTIONS!

1. What you need to Consider Before Commissioning

Read this instruction manual carefully, before starting to use your By the Glass® Wine Dispenser. It contains important information for the installation, operation, and for the care and maintenance of this appliance.

The manufacturer is not liable for damages resulting from gross disregard of the instructions and information contained in the instruction manual.

2. Notes on Handling Packaging Material

The packaging material protects the By the Glass® Wine Dispenser and its accessories for transport purposes. It consists of recyclable materials. Please protect the environment, by ensuring an eco-friendly disposal.

Warning!

Packaging material is not a toy for children! Improper handling of the packaging material, and, in particular, the foils used, may result in injury and even suffocation.

3. Technical Guidelines and Standards

The By the Glass® Wine Dispenser meets the requirements of the following EU directives:

- 98/37/EC Machinery Directive
- 73/23/EEC Low Voltage Directive
- 89/336/EEC Directive on Electromagnetic Compatibility

The By the Glass® Wine Dispenser serves for cooling, storing and for dispensing doses of wine.

Warning!

Repairs can only be performed by an expert designated by By The Glass International B.V. Any improper repair can void the warranty.

4. Tips for the Setting-up Location

If you do not install it right away, store the machine in a dry, sheltered place.
The Wine Dispenser shouldn't be installed near a heat source or exposed to direct sunlight.
The manufacturer guarantees the performance data for sites of up to 25 °C room temperature and 65 % relative humidity. Higher values result in a degradation of performance, and can increase the formation of condensation.

When choosing a suitable location, consider the weight of the machine filled with wine bottles. Ensure that the installation surface is level, and that the Wine Dispenser stands on all of the adjustable feet, as this could lead to vibrations and thus to undesirable noise otherwise.

If your Wine Dispenser is equipped with an integrated refrigeration compressor, its ventilation can be provided either by the rear or the side vents. Make sure that the vents of at least one of these two sides are not blocked.

The minimum distance to any limitations of the ventilation space is 15 cm for unilateral ventilation, and, for multilateral ventilation, 10 cm on one side and 5 cm on the second ventilation side. Make sure that the ventilation area itself is well ventilated.

Deviations from these requirements, for example, for the purpose of fitting in furniture, are to be discussed with By The Glass International B.V., and are only permissible, when sufficient ventilation can be ensured by appropriate measures. Otherwise, performance degradation can be the result, and even damage to the cooling unit.

Warning:

- The machine is to be transported and stored only standing upright. Never lay the unit on its side, and do not tip it.
- Don't install the unit near flammable materials.

5. Electrical Connections

The Wine Dispenser may only be connected to a grounded outlet by use of the supplied grounded IEC power cord.

The required mains voltage is **220/230 volts, 50/60 Hz**.

To connect the By the Glass® Wine Dispenser, only use the supplied IEC power cord.

Warning:

- Check for possible damage. If the IEC connection cable is damaged, it must be replaced by the manufacturer prior to startup.
- Never pull on the cord to disconnect the plug from the socket.
- In case of damage, pull the power cord immediately, and contact By The Glass International B.V.

6. Condensate

Run the condensation hose from the device in a direct line down into a drain, an electric vaporizer or in a collecting container that you regularly check and empty when necessary. Make sure that the hose isn't twisted, which could prevent the outflow, which could in turn cause damage to the Wine Dispenser (see Para. 19).

7. Recommendations for Gas Use

For protecting the wine from oxidation, the system can be operated with either nitrogen or the noble gas argon. Both gases are non-toxic, non-flammable, tasteless and reactive neutral (inert), which makes them suitable for displacing atmospheric oxygen from the bottles. For the operation of the system, it makes no difference, which of the two gases you use.

The supply usually takes place with gas cylinders that can be purchased from a local dispensing gases supplier. When using nitrogen as inert gas, make sure you order pure nitrogen, as nitrogen is commonly mixed with CO2 in the area of draft equipment. Respect the following specifications:

Nitrogen gas for food applications (E941) or **Argon gas for food applications (E938)**

The e-number certifies the gases as approved food additive in the EU. Gases for food use are sold by suppliers under brand names such as "Biogon N" (Linde) or "Aligal 1" (Air Liquide).

Warning:

Said gases are non-toxic and non-flammable, but they can displace breathing air in very small, poorly ventilated areas; and the containers are under high pressure, which means that for the handling and installation of such gas cylinders special safety regulations apply. Please consult your gas supplier, and find out about the safety regulation that is applicable for your business.

8. Tips for Inserting Wine Bottles

You can store a second row of closed bottles standing upright in the Wine Dispenser, waiting at perfect temperature, to be used. Do not let these bottles touch the inside of the machine. They could freeze.
Clean the inside of the device of dust before the first use, according to the care instructions below (see Para. 17).
Do not leave the sliding door open for too long. It is better, to open and close the By the Glass® Wine Dispenser several times, rather than leaving it open for a longer period of time. This will save energy, and prevent the formation of condensation.

SETTING-UP AND OPERATION

9. Commissioning

Fig. 1: Power switch and dimmer (in this case top right but position depends on model)

Press the power switch on the side or back of the unit. It lights up green when switched on.
After this, turn on the device by pressing the thermostat power buttons(⏻) on the front side. The compressor and the fans start to cool the temperature zones.
Turn on the **light** on the thermostat for the white wine zone (see Fig. in Para. 13). There is a **dimmer** above the power switch, which allows you to regulate the light.

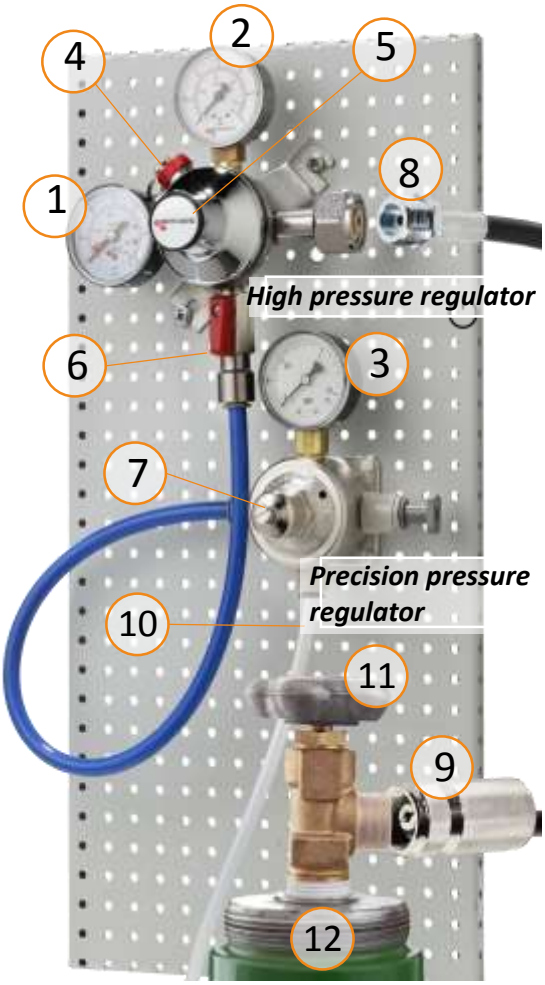
10. Connecting the Gas Supply

To operate the system, you need a **pressure regulator** to reduce the inlet pressure of the gas cylinder, which can be, depending on the filling pressure and degree of filling, up to 250 bar. The pressure has to be reduced to the desired, stable operation pressure of 0.25 to max. 0.4 bar. The By the Glass® Wine dispenser Standard comes with a high-quality pressure regulator.
The following information relates to the model supplied at the time of publication of this manual for the use with refillable gas cylinders (as of 9/2016). It is a connected combination of a **high-pressure regulator and a precision pressure regulator** on a mounting plate. For different models, please note the separate instructions of the manufacturer.

The following procedure steps are usually performed by an installer when installing your By the Glass® Wine Dispenser.

Only in exceptional cases the necessity will arise for the user to perform work or adjustments on the pressure regulators (see also Para. 12).

Fig. 2: Combination of high pressure and precision pressure regulator



1. Display of the input pressure
2. Transition pressure display
3. Display of the discharge pressure
4. Manual release valve
5. Set screw for the transition pressure (Allen screw under cover)
6. Closing lever
7. Screw for the discharge pressure with locknut
8. High-pressure hose I (connected to high-pressure regulator)
9. High-pressure hose II (quick coupling for gas bottle)
10. Low-pressure line to the dispensing system
11. Shut-off valve of gas cylinder
12. Gas cylinder

● Mount the supplied pressure regulators accessibly and easy to read on a wall or in the appropriate furniture piece. When choosing the mounting location, make sure that the lines can be connected with the least possible torsion, so that they are not under tension and move as little as possible during operation.

● Connect the high-pressure hose (8) to the high-pressure regulator. The thread must be screwed very strongly and durably, to ensure tightness. Use two matching wrenches, to avoid damaging the pressure regulator.

● Connect the quick coupling of the high-pressure hose (9) to the gas bottle. The quick coupling has a safety mechanism that prevents the releasing of the connection when under pressure. To release the connection, you must first close the lever of the gas cylinder (11), and then release the pressure by means of the manual release valve (4). (See also Para. 12 "Exchanging the Gas Cylinder".)

● Connect the low-pressure line of the Wine Dispenser (10) to the precision pressure regulator. For this, pull off the red locking ring, and insert the tube all the way into the plug-in connection. Secure the connection again with the red locking ring.

● Close the shut-off valve (6) on the pressure regulator (horizontal position), and then slowly open the cock of the gas cylinder (11). First, check whether the connections on the high-pressure regulator (8) and the cylinder (9) are audibly proof.

● Now set the transition pressure (2) with the adjustment screw (5). Upon delivery, the valve is closed, and the display shows “0”. Turn the Allen screw under the cover in clockwise direction until the indicator (2) shows 1 to max. 1.5 bar. If the pressure exceeds 1.5 bar, turn the screw backwards. For the indicator to drop, you must first let out gas manually via the release valve (4).

● Now open the red lever (6), and adjust the discharge pressure (3) with the adjustment screw (7) on the precision pressure regulator provisionally. Upon delivery, the valve is closed, and the display shows "0". Keep turning the adjusting screw clockwise, until the display shows a pressure between 0.25 and 0.4 bar (see Para. 11 for subsequent fine adjustment of the discharge pressure).

● First check the tightness of the system. You can **test the tightness** reliably by closing the gas cylinder again (11), while keeping an eye on the pressure gauge for the inlet pressure (1). If even after several minutes, the manometer for the inlet pressure doesn't drop, the system keeps the built-up pressure and is therefore tight.

● If, however, after closing the gas bottle, the inlet pressure drops after a few minutes, this indicates a leak. The check for possible leaks at the joints can be performed with a leakage spray by looking for bubbles forming.

Warning:

Always open the gas cylinder slowly and not abruptly, to prevent damage to the lines and the pressure reducers.

11. Adjusting and Regulating the Gas Pressure

Fig. 3 Pressure gauge with scale for inlet pressure

Fig. 4 Pressure gauge with scale for the transition pressure (max. 1.5 bar)

Fig. 5 Pressure gauge with scale for the dispensing (operating) pressure (0.25-0.4 bar)

The inlet pressure from the gas cylinder is displayed on the pressure gauge for the inlet pressure (Fig. 3), and, depending on filling pressure, can amount up to 250 bar for a full bottle. The inlet pressure decreases with consumption of the gas, and is accordingly an indicator for the bottle running out. When the bottle is empty, the pressure gauge will show "0".

Keep checking the inlet pressure gauge at regular intervals, so that you can order a new bottle of nitrogen or argon in time.

The discharge pressure (Fig. 5) is at the same time the **operating pressure** of your dispensing system. It determines the **flow rate of the wine**, and in conjunction with the programmed time, also the **dispensed volume**. The ideal operating pressure lies between 0.25 and a maximum of 0.4 bar.

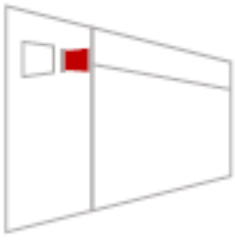
Within this range, a low pressure results in a quiet, slow flow rate, and correspondingly in longer dispensing times. Higher pressures within the specified range lead to a faster flow of wine, leading to formation of bubbles in the glass in the short term, which may be perceived negatively by some people.

The setting of a lower pressure than 0.25 bar is possible, and leads accordingly to very slow flow rates. Higher pressures than 0.4 bar should be avoided. They could cause damage to the internal lines.

When setting up the system, choose the optimal flow rate; if necessary, by testing with different operating pressures, and don't change it anymore, because a subsequent pressure change would require the reprogramming of all the dispensation volumes (see Para. 11).

Usually, at the installation of your system, the technician will preset the operating pressure and calibrate the respective dispensing amounts on this basis. However, you can also make these settings yourself:

The other number item references on this page refer to Page 6, Fig. 2.



- In order to adjust the dispensing (operating) pressure, loosen the locknut on the adjusting screw of the precision pressure regulator (7).
- Turn the screw clockwise for a higher pressure and counter-clockwise in order to reduce it.
- Note that the pressure gauge reacts immediately only to pressure increases. In order for the display to show a reduction of pressure, you first need to release the pressure from the system by pressing one of the dispensing buttons. You might possibly have to remove an already connected wine bottle from its position.
- Finally, secure your chosen pressure by re-tightening the locknut.

**) See Para. 15 ff. for explanations on card technology.*

12. Exchanging the Gas Cylinder

The following number item references refer to Fig. 2 on Page 6:

- Before changing the gas bottle, close the cylinder (11), even if the cylinder has been completely emptied.
- Release only the quick coupling of the high pressure hose (9) from the gas bottle. Make sure not to twist the high-pressure hose if possible, to prevent loosening the connection to the high-pressure regulator.
- The quick coupling has a safety mechanism that prevents the releasing of the connection when under pressure. If you would want to change the gas bottle before completely emptying it, you would first need to release the pressure with the manual release valve (4), before being able to release the gas cylinder coupling.
- Connect the new bottle. Open the new gas cylinder slowly and not abruptly, to prevent damage to the lines and the pressure regulators.

When handling compressed gas containers, always observe the safety instructions of your supplier and possibly existing trade association standards!

13. Thermostats and Separating the Temperature Zones

Fig. 6: Guide rail for plexi divider. Alternatively, a fixation with pins and loops is used.

Your By the Glass® Wine Dispenser has two temperature zones, which can be used variably according to varying ratios of red and white wines in the climatized bottle compartments.

Insert the **plexiglass divider** before placing bottles in the desired positions. For this, introduce the divider inclined from below in the appropriate guide rails or loops on the housing ceiling, and, afterwards, place it upright on the inside bottom floor.

The two temperature zones are controlled via two separate **thermostats**. The cooler temperature zone (white wine zone) must always be designated to the side of the By the Glass® Wine Dispenser where the thermostat displays are located.

Fig. 7: Arrangement of thermostats for devices with connected and with separate refrigeration.

For a device that has its own cooling compressor, the outer thermostat is designated for the white wine zone. For a device with separate or central cooling, the upper thermostat controls the white wine zone.

The thermostats and control panels for both zones look the same from the outside.

However, the displays differ in a way that the operation of the compressor and defrosting function are only found on the thermostat for the cooler zone. Also, the **light** is only switched via the control panel on the thermostat for the white wine zone.

14. Adjusting and Regulating the Temperature

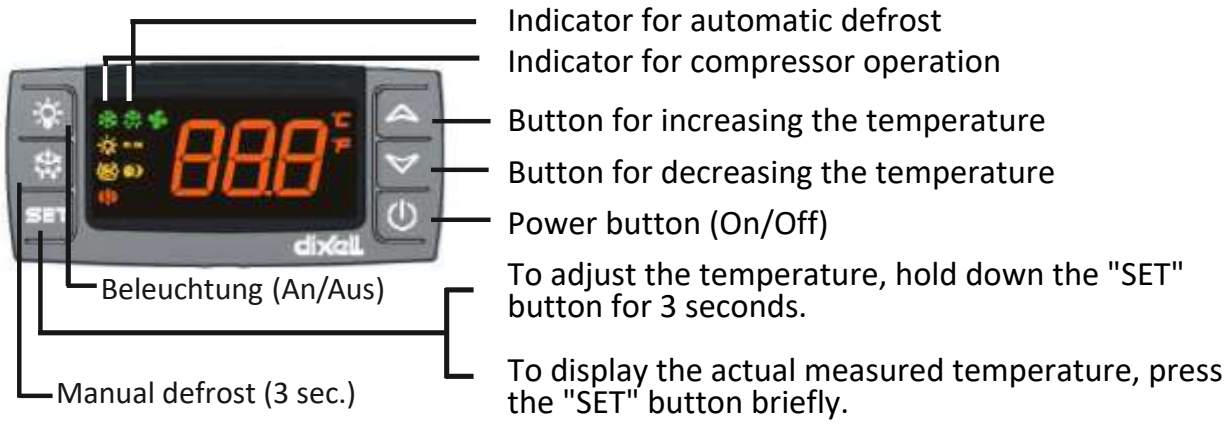


Fig. 8 Thermostat for white wine zone (red wine thermostat looks similar)

The factory settings are 16 °C for the red wine zone, and 6 °C for the white wine zone.

In order to **change the temperature settings**, follow these steps:

1. Hold down the "SET" button for 3 seconds, until the "°C" begins flashing on the display.
2. Change the temperature using the buttons "▲" and "▼".
3. To confirm the set temperature, press again "SET".

Per factory settings, you can choose temperatures for the cooler zone in the range of 4-12 ° C, and for the red wine zone 15-21 °C. For these temperature ranges, it is ensured that the selected average temperatures can be maintained in both compartments.

For energy efficiency reasons, we have preset a tolerance of +/-2.0 °C for the start and switch-off point of the compressor, by which the air temperature in the compartment may vary, because the wine keeps the set average temperature, being a thermic inert liquid.

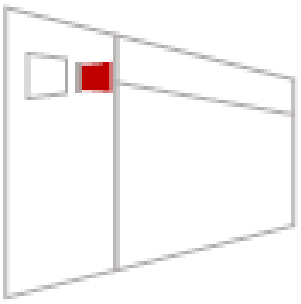
In idle state, the thermostat display shows the preset temperature. Press the "SET" button briefly, to display the **actual measured temperature** in the respective compartment.

You can change the preset temperature ranges, for example for exclusively presenting white wines in the Wine Dispenser, by means of the Expert Menu of the thermostat.

To do this, hold down the "SET" and "▼ " buttons simultaneously for 3 seconds, until the programming menu appears. Release the buttons, and hold down the "SET" and "▼ " buttons simultaneously for another 7 seconds. The hidden menu for expert settings appears. Release the buttons, and scroll using "▲ " and "▼ " through the menu to the position "US" for the programmable temperature maximum or "LS" for the programmable minimum. Select the entry by pressing "SET", and change the corresponding value with "▲ " or "▼ ". Confirm the new value by pressing "SET". Leave the Expert Menu by simultaneously pressing "SET" and "▲ ".

When accessing the Expert Menu, be careful, not to accidentally change other parameters. Temperature settings below 4 °C can lead to ice formation and may spoil your wines and damage the device.
Also, please note that the manufacturer's energy consumption information is only valid for factory settings of the thermostats.
If you set both thermostats to operate the entire device with the same temperature, it is better to remove the divider for reasons of energy efficiency.

15. Changing and connecting the Wine Bottles



Insert the **service card** into the card reader to change the bottle types. The service menu appears on the display. With the inserted card and in the service menu view, you can give a "mini-sip" by pressing the left dispensing button. This should help you to tap a new bottle and if necessary to displace remaining old wine there or water from the hose line (see below).

In order change and to connect the bottles, follow these steps:

1. Grab the flexible hose at the upper thicker part, and bend it slightly forward towards you.
2. Pull the rubber stopper down to the end of the thicker part of the hose. At the initial set-up, the supplied rubber stoppers must first be plugged onto the hoses.
3. Stick the hose end into the bottle, and press the bottle firmly onto the stopper, to close the bottle tightly.
4. Keep holding the upper thicker hose end, and slide the bottle with the stopper upwards on the tube, until you can place it upright and securely on the floor of the cooling chamber.
5. Hold a glass under the tap and press the left dispensing button to tap a small volume of the wine. As a result, that displaces residual air from the bottle and the hose, as well as rests of liquids previously in the hose.
6. The bottle is now protected against oxidation and ready for dispensing.
7. **Confirm each newly connected bottle after the changing and its content via the „Change Bottle“ program menu - see the following section.**

! ***Practical tip:*** When replacing the bottle, you can let the remaining wine in the tube flow back into the bottle by repeatedly pressing the left dispensing button (with the connected service card and the service menu view), if the hose end hangs freely in the bottle after releasing the stopper.

16. The customer card management system Wine by the Card

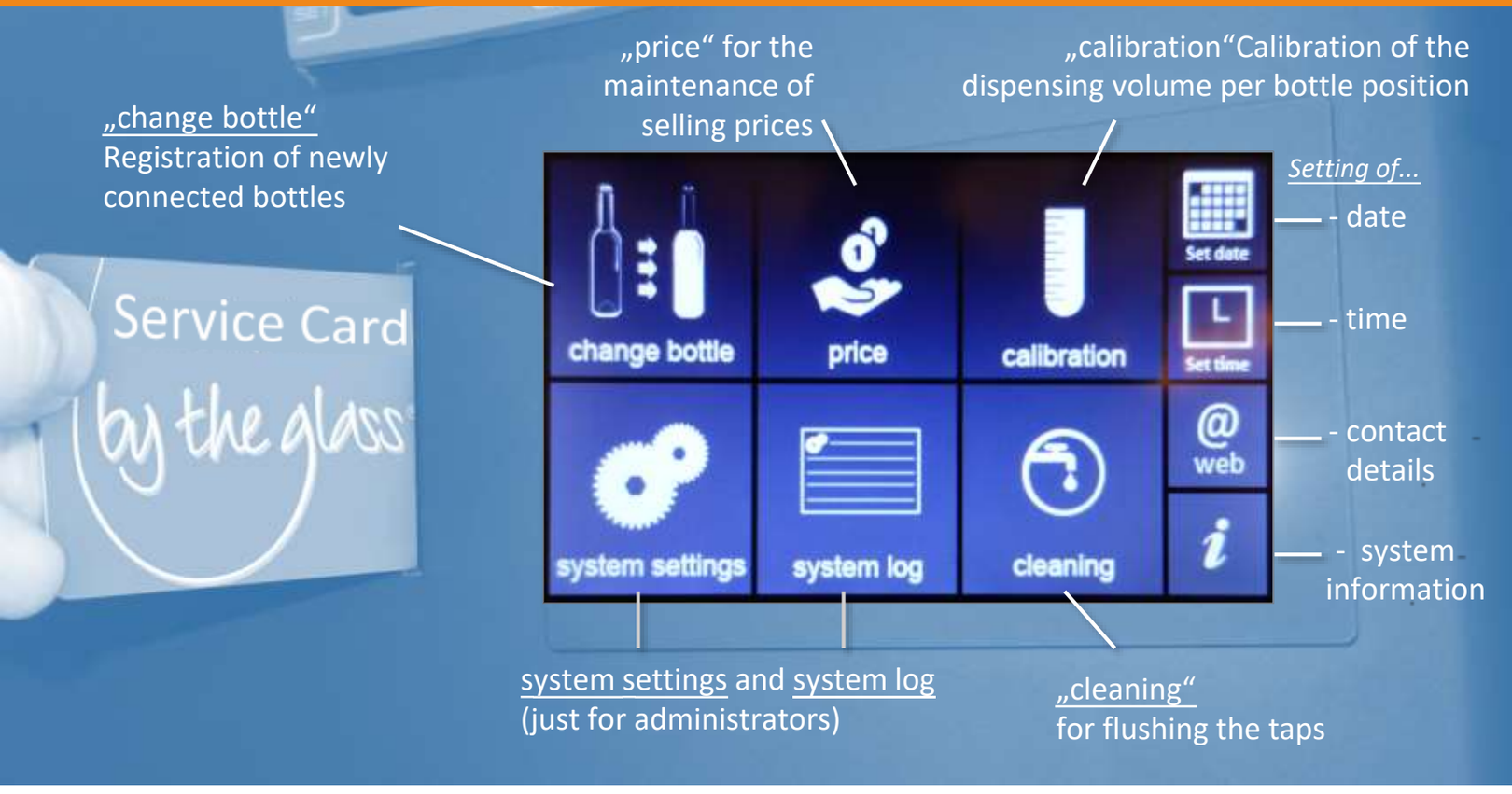


Fig. 9 – Wine by the Card service menu

The customer card management system By the Glass® Wine by the Card enables self-service and billing with so-called RFID smart cards, both according to consumption and with prepaid cards.

The technology is based on the most widely used standard for contactless smart cards ISO/ IEC 14443 A (13.56Mhz). These are specifically pre-coded for your system for a safe, unique classification. Special conditions and technical requirements apply to the alternative use of if so existing customer or room cards of the same standards in connection with our card systems.

For setting up and managing the customer card system, you will receive an **activation card** and a set of **service cards.** In particular, please keep the activation card safe as it can only be replaced through our headquarters for safety reasons. Other service cards, on the other hand, can also be obtained from dealers.

You need the activation card to set up the external card reader on your PC or checkout for card management, as well as for the system settings and access to the log menu on your dispensing system (see paragraph 20 ff).
You and your employees respectively require the service card for the daily management of the system (menu items: change bottle, price, calibration and Cceaning – see Para. 17 ff).

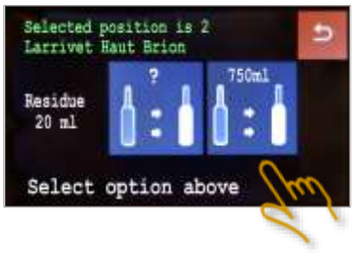
Specific setting steps for which you need the service or activation card are marked with the adjoining pictogram in this manual. The connection of your dispensing system to a PC and the installation of the included back office software is necessary, for some settings steps (see Para. 20).

17. „Change Bottle“ - Registration of newly connected bottles

Newly connected bottles and their contents must be logged into the card system via the menu “change bottle”:

- Insert the service card into the card reader.
- Select the feature “change bottle”
- Choose the bottle position you have restocked.
- Select the right option "750ml"* if you have connected a full 0.75l bottle.

- The system confirms the successful bottle change.
- Select other bottle positions which you have changed or leave the menu with „⮌“
- If the newly connected bottle has a different level, such as a magnum or a bottle that has already been partially consumed, choose the left option „?“.



- Insert the different volume of filling in ml via the display – increases per decimal place with „+“, lowering with „-“
- Confirm your entry with „✓“ o leave the menu with „✖“

Estimate the level of partially consumed bottles as best you can, e.g. 375ml for a full or 500ml for a bottle filled by two-thirds.

*) See Para. 2 for the presetting of different bottle sizes.

! Registration of newly connected bottles is essential for inventory management in connection with billing via customer cards. Otherwise the dispensing system will deem unregistered full bottles to be empty and will refuse the disposal. The system may try to pour out registered bottles with an incorrect level, even though these are already empty. That would result in wrong charges of customer cards.

18. Programming the dispensing volume (Calibration)

Explanation of how it works: What does calibration mean?

Your bar conditioning cabinet has a programmable automatic metering for three dispensing amounts, which you can choose freely and program firmly. The flow speed depends on the adjusting operating pressure (see paragraph 11) and the metering of the dispensing volume is time-controlled. This means that you must inform the system on how much it pours in a given delivery time, after determining the operating pressure. So that it can calculate the time, the valves need to open for the delivery of the desired dispensing volume. This learning process for calibrating the dispensing volume can be carried out via the menu item „Calibration“.

At the initial setup, the service technician will usually calibrate all tap positions for you. However, since the flow rate in addition to the adjusted pressure also depends on the viscosity of the particular wine and if applicable on any existing deposits in the pipelines. It may be useful to check the dispensing amounts from time to time and to calibrate individual positions again. We explain the necessary steps below:

Programming of the dispensing volume (calibration)– continuation

To calibrate the dispensing amounts, provide a **measuring cup** with scaling as accurately as possible, or ideally, a **kitchen scales with digital display**, from which you will pull off the Tara of the measuring cup before.
Connect a bottle of water to the relevant position (see "connection of bottles" in Para. 16). Insert the service card into the system and please make sure that the bottle is tapped, i.e. that the water is coming up at the tap before you select the menu item "Calibration"! by pressing the left dispensing button at the relevant position.

Now choose the menu item “calibration”…

- Select the suitable bottle position
- Keep the measuring cup under the relevant tap and press one of the dispensing buttons
- The tap now releases water for exactly 10 seconds
- Read from the measuring cup or ideally from the display of your kitchen scales, how much water the device has emitted in 10 seconds (1g of water equals 1ml).
- Compare the volume with the display on the touch display
- Adjust or enter the correct volume you measured through the display.
- Confirm the input with „✓“

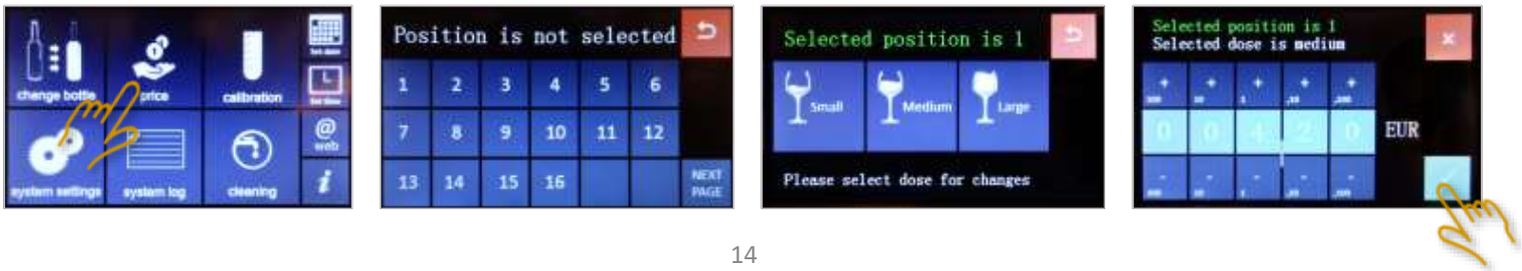
! **Practical tip**: Since wine usually flows a little slower than the water used for calibration, the device would give a little less wine at the relevant position at the same time.

To meet that fact, you can enter 2-4ml less than you have balanced/measured via the touch display. If necessary, check the correct calibration with wine and a customer card for any dispensing volume.

In general: Lower volume input via the calibration menu leads to larger dispensing volume on the tap. If, on the other hand, the tap gives too much, the quantity which was entered during the calibration and stored in the system will be too small.

19. Programming of the prices (via the service menu „price“)

You can enter the selling prices in the service menu via the touch display and change them at any time or manage the prices via a connected PC along with the wine names (see Para. 21). The maintenance of the prices per bottle position and dispensing volume via the touch display as well as the menu item "price" is self-explanatory and just below-mentioned in the picture. Please make sure to confirm your entries with „✓“.



20. The back office software By the Glass® Wine Monitor (AES)

With the back office software By the Glass® Wine Monitor (AES), you can easily manage and export most system settings such as prices and dispensing volume from a connected PC or laptop and download as well as export detailed sales information from the bar system. Use the back office software to program the displayed wine names in connection with the LCD price field display option.

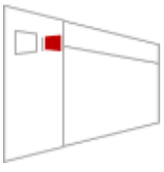
Installation

The connection happens through the supplied COM/USB converter cable via the 9-pinned (DE-9) connection of the bar system to a USB port of your PC. In order for the PC or back office software to correctly detect the serially communicating system via the USB interface used as a COM port, you must first install the provided Prolific USB-to-Serial Driver on the PC.

Then, install the back office software By the Glass® Wine Monitor (AES) on your PC. The system requirement is **Windows 7 or higher**. Please note that the installation must be done as suggested on the hard drive (C:/Programme ...) for PCs used in a network or by different users as well as the unit of the storage location for system and sales information.

Besides, the configuration file must be created under the user (under C:/User/AppData/ Local ...) who is supposed to operate the system. The unit is carried out automatically during installation. The attention to the userbound unit of the configuration file is important when the installation is done by an administrator.

Connect your PC to the bar system via the included COM/USB converter cable after the successfull installation of the driver and the back office software.



Insert the service card into the card reader and go to the service menu „i“ (System information) .

Start By the Glass® Wine Monitor (AES) on the PC.

By the Glass® Wine Monitor (AES) – Program start and connection setup

Select „Start Search“ from the welcome menu to access the bar system connected to your PC.

When it is unconnected, you can access the sales information via the welcome menu which was downloaded to your computer → „reports“ (see page 17).

If you have a successful connection, the start menu will appear with the additional choices „bottle settings“ and „system settings“ on the left edge of the program window.

If the connected control system is not detected, start AES again. Please make sure to insert the service card and to select "i" (system info) on the touch display. Check with your PC's control system to see if the device in the device manager has been recognized as new hardware and if necessary, the COM port setting via system control/device manager/connections. If you have installation problems, ask your administrator or contact us for an analysis of connection settings by remote maintenance.

By the Glass® Wine Monitor (AES) – Bottle settings: names, prices, amounts...

Select "bottle settings" to maintain wine names, prices, bottle sizes and dispensing amounts.

The back office software now first downloads the settings currently stored on the bar system.

Then use the drop-down menu to select the bottle position you want to edit. The positions are numbered starting on the side of your bar system, on which the card reader is positioned with the touch display.

You can maintain the fields name, origin (Origin), producer (Producer), varietal (Grape Variety) and vintage (Vintage).

In conjunction with the **LCD Ads** option of each wine, your entries will appear in the fields name and producer on the displays.

There are two lines of 20 characters each, on the displays. Choose appropriate abbreviations, otherwise your entries in the fields name and producer will be automatically shortened on the LCD displays.

Please note that only letters a-z, A-Z and numerical entries are allowed. Don't use special characters or vowel mutuation.

You do not have to stick to the standard "Name" and "Producer" for the display names on the displays. But you can also enter the origin or grape variety in the field producer to show them in the second line of the display (see example).

Enter the **bottle size** in ml without point and comma in the field volume (content), e.g. 750 for a normal wine bottle or 1000 for a litre bottle or 1500 for Magnums.

Add the **prices** for each dispensing volume under price. Please be aware to use a point to separate the decimal places instead of a comma. You can also e.g. insert 0 as a value, to provide the first sip free of charge.

Enter the individual **dispensing amounts** in ml (without point or comma) under dose.

By the Glass® Wine Monitor (AES) – System preferences: Currency, Minimum stock level

Use the „System Settings“ option to determine System settings currency, number of bottles and minimal residue.

A minimum residue in the bottles is said to ensure that no shortages are served and charged to customers, as some ml are expected to get lost when the bottles are connected and a small residue remains at the bottom of the bottles. 25ml are factory-preset. You can further reduce the minimum stock to increase yield. The system asks the customer to make a different choice if the requested quantity is larger than the system inventory ./. Minimum stock.

By the Glass® Wine Monitor (AES) – reports (stock and sales information)

The menu **reports** allows you to download stock and sales information from the bar system to your PC, to display the information and to export it to Excel.

The display of already downloaded sales information about the menu items **revenue** and **logs** is possible even without an existing connection of your PC to the bar system.

When you view the menu reports with existing connection, at first the current stock and sales information will be downloaded to your PC.

Please note that the sales information is transferred to the database on your PC and deleted from the bar system, i.e. a historical completeness of the database is only guaranteed if you always use the same PC for downloading the sales information.

If you use multiple PCs (laptops) for the management of the bar system and the download of the sales information, you can only complete the sales history by exporting and then merging it into Excel.

After successfully downloading the stock and sales information, you will automatically get into the menu item **states bottles**. Here you will find, in a clear display, the current stocks in the bottles.

You will see an overview of the turnovers and sales per bottle position under the menu point **revenue**. You can choose the display period and enter an individual rate for showing the VAT.

Under **logs** you will **find** all transactions in chronological list format as well as all further interventions (events) in the system by using the service cards. You can choose the display period and export the data.

21. The card administration with By the Glass® C-Manager

Customer card information and customer card credits or consumption information is managed through the included external card reader with USB port and the user-friendly desktop application By the Glass® C-Manager.

The customer cards are pre-coded by the manufacturer for the clear assignment and use on your bar system. You can decide whether you want to hand over the cards with prepaid credit to your customers (credit cards) or whether you want to settle the amounts according to consumption at check-out (debit cards).

In the event of debit cards, customers must present the cards to you when leaving the local to read out the consumption information and you can charge accordingly. In the event of credit cards, issue the cards with a prepaid balance in fixed (e.g. 10.00, 50.00 or 100.00 euros or CHF) or variable denomination (desired amount of the customer). As a result, the customer can top up the credit on the card again at any time, e.g. with a desired amount or credit packages to be defined by you.

Prepaid "credit cards" have been proved to be particularly beneficial and easy to handle. Therefore, this type of settlement is particularly favoured and used.

Installation

The card reader is connected via USB to a PC with **Windows 7 or higher**. If you use a Windows-based checkout system, C-Manager can run in a window in the background of the checkout application. Otherwise, it makes sense to place a lower-priced laptop next to the checkout on which C-Manager and the card reader are constantly installed.

Please note that the installation must be done as suggested on the hard drive (C:/ Programme ...) for PCs used in a network or by different users, as well as the unit of the location for the database.

In addition, the configuration file must be created under the user (under C:/User/AppData/ Local ...) who is supposed to operate the system. The system is carried out automatically during installation. Attention to the user-bound unit of the configuration file is important when the installation is done by an administrator.

Start the installation file C-Manager light (VS x.x).exe and follow the suggested installation steps, including if necessary, the installation of the unit of a desktop icon for easier retrieval. Your computer's security settings may advise against an installation. You can trust the source – select „still run“ under „more information“.

Following the installation of C-Manager, the automatic request to install the **SQL Server Express** program begins. This program is needed to set up and manage the database of the customer card information. It is a standard application for Windows computers. Follow and confirm the recommended installation steps – the process can take a few minutes.

Once the installation is complete, a **reboot** of your computer is required. Then connect the card reader via USB and start the C-Manager program.

During the initial installation, you will be asked to place the **activation card** at the program start. By reading the activation card, the card management is firmly activated for your bar system. The successful activation will be shown to you. Then, remove the activation card and keep it safe.

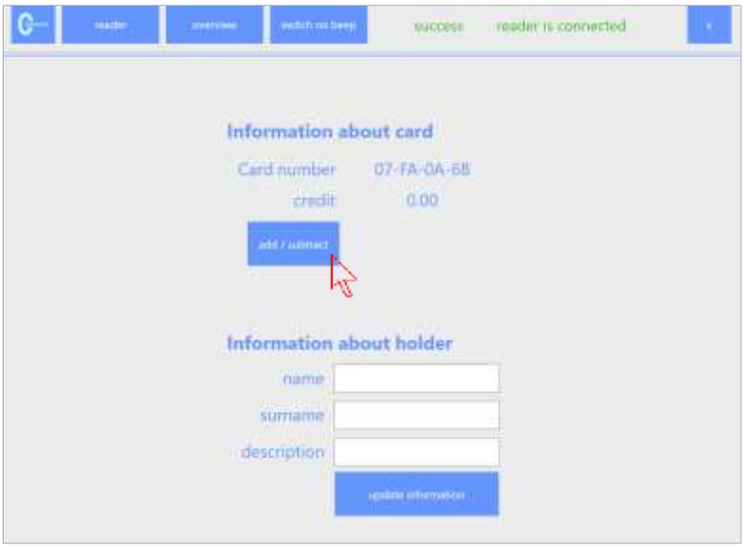
When C-Manager starts, the adjoining program bar appears.

The successful connection of the card reader will be shown to you. If the card reader is not recognized, check the connection and restart C-Manager.

Choose reader and then credit manager. The option activator is not assigned.

Place a customer card on the card reader.

Please be aware that contactless RFID smartcards can be recognized up to 8cm away, so other cards in the area can interfere the detection. However, the range is dependent from specific types. If a card is not detected, you may need to rotate it on the reader. RFID cards that have not been pre-coded for your system are recognized but are shown as unprocessed.

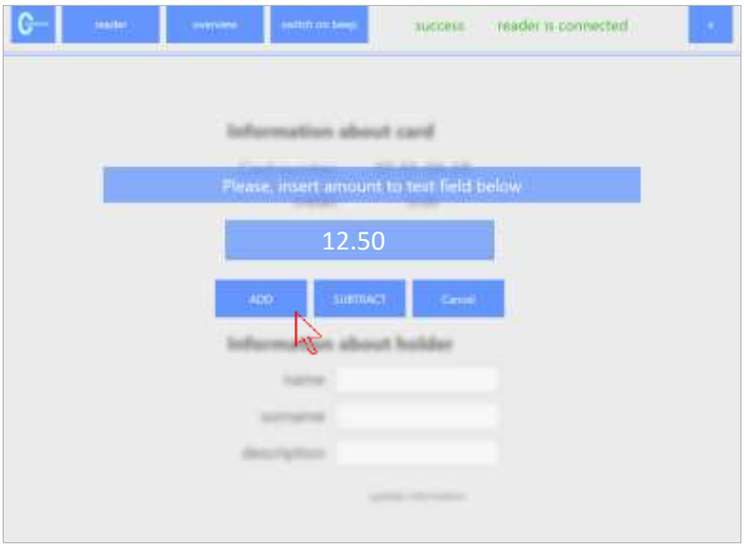


When the card is detected, the adjacent mask with the disclosure of the current balance will appear on the card („credit“).

You can add a name or, e.g. an email address to the card. The information will appear along with the unique RFID card number (UID) under the card information in your database (see overview on page 20).

Select „update information“ to save the entry.

Choose add/subtract to add or subtract a credit to the cards.



Enter the value and select ADD to add an amount to the existing balance on the card, or SUBTRACT to deduct the amount.

Please make sure to use a point instead of a comma, to separate the decimal place.

The successful crediting or debiting is confirmed by C-Manager. Click "OK" for the next card...

By the Glass® C-Manager – Customer cards statistics (overview)

Select overview to get into the menu for statistics and customer card information.

You can also enter the menu o without actively connecting to a card reader. It accesses the data in your database that captures all transactions you collect through a card reader and C-Manager which are connected to that PC. Please take into account that the completeness of the database is only guaranteed if you record all transactions through this PC.

Under the menu item STATISTIC you will find an overview of all the cards collected via your card reader.

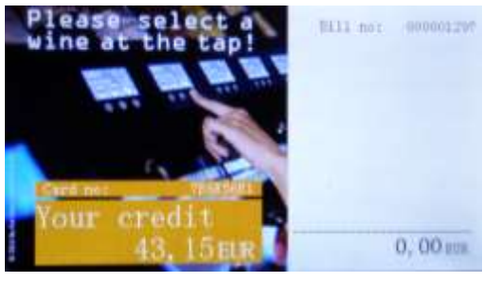
You can find the credit information per card (with card number and name added by you if necessary) under CARDS, at the last time the card was collected through the card reader and C-Manager. Please note that this is not the current balance on the card, as it has generally been used on your wine bar system in the meantime.

You can find all transactions in chronological order under EVENTS, captured through the card reader and C-Manager on this PC.

22. By the Glass® Wine by the Card from the customer's point of view

The customer is asked to insert his card via the touch display of your bar system. Then, the current balance on the card is shown in the left part of the system. The particular reference quantities and amounts are listed in the right area.

Tip: Here is the current firmware version of your bar system.



CARE AND MAINTENANCE

23. Cleaning the Surfaces

If possible, clean the inside and outside of the By the Glass® Wine Dispenser only with a damp cloth. If necessary, use only mild detergents on soap basis. When cleaning the interior, turn refrigeration off (set device to "Standby"); avoid cleaning the interior with perfumed cleaning agents.

For cleaning, you can take the sliding doors out of the guide rails. For this, lift the door upwards, and pull it bottom first out, towards you. If you use a glass cleaning agent to clean the sliding door, let it first dry completely, before reinserting the door.

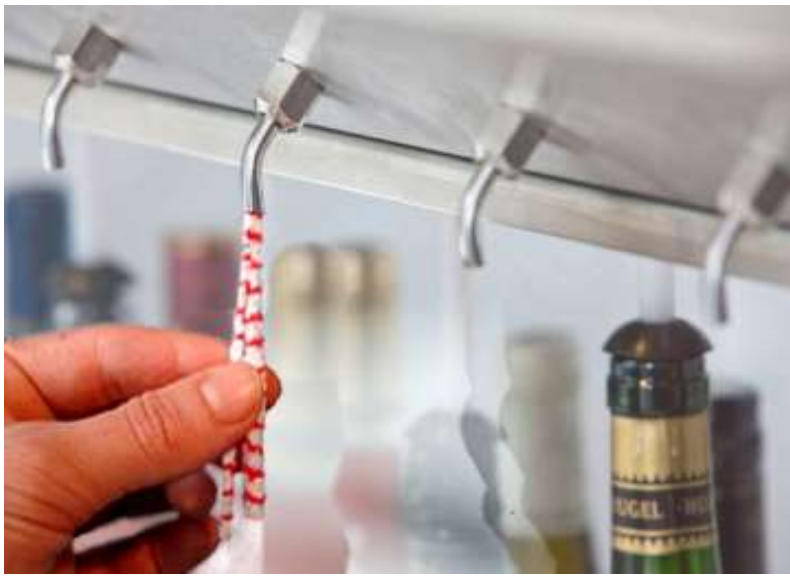
Warning:

For cleaning stainless steel surfaces, do not use chemicals, petrol, alcohol, disinfectants, vinegar, harsh detergents, acid, or abrasive cleaning agents, and also no abrasive cleaning sponges! Otherwise, you might create rough places on the otherwise stainless material that will be susceptible to oxidation.

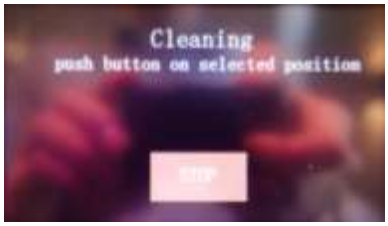
24. Cleaning the Taps and Lines

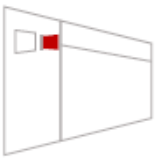
Proper care for the wine taps and lines ensures long life, and flawless and hygienic operation of your By the Glass® Wine Dispenser. This requires a few, easily performed steps:

1. The short taps are the wine carrying part, which comes into contact with air. It is here, where wine and its sediments can leave dried stains, which can lead to clogging. In addition, during the warm season, droplets in this area can attract flies. **For this reason, wipe the taps regularly, and clean them with a damp pipe cleaner.** To do this, take a bowl of water. Fold the pipe cleaner once, dip it into water, and run it all the way into the tap. Do this for all the taps.



2. The wine carrying lines do not come into contact with air during operation. Nevertheless, over a long period, deposits, and particularly discoloration, can occur there.





Flush the lines at regular intervals with water, especially if you start using a new wine, or if you change a wine bottle that has been standing in the By the Glass® Wine Dispenser for a longer time. For this, connect a bottle with cold tap water, and pump several hundred milliliters through the line by repeatedly pressing the button "Large Glass" (or holding it down for 3 sec.) at the tap in question.

3. If, despite respecting the above care tips, deposits have formed in taps and lines, you can dissolve them with a mixture of water and a light dose of pure citric acid powder. Follow the dosing instructions on the package, and proceed as when rinsing the tubes with water. However, let the citric acid act for about 20 minutes in the lines and taps, and afterwards do a thorough rinse with water.

4. Regular flushing with citric acid powder, e.g. at intervals of 2 or 3 months, can prevent discoloration of the red wine tubes. However, you cannot prevent discoloration completely. But note that it is not a hygienic hazard. For reasons of visual appearance, discoloration can be eliminated by replacing the tubes in the course of maintenance.

5. For residue in taps that don't want to come out, leading to a deterioration of flow, it is recommended, to demount them on a case by case basis with a wrench (size 14), and to soak them for about one hour in a mixture of water with a higher dose of citric acid powder. Afterwards, you must rinse them thoroughly with water.

25. Manual Defrost

Your By the Glass® Wine Dispenser is equipped with an **automatic defrost system**. The resulting condensation water flows out from the unit via the designated tube. Manual defrost will be necessary only in exceptional cases, e.g. when ice forms in the interior. For this, hold down the button "Manual Defrost" for 3 seconds (see Page 10, Fig. 8). The manual defrost cycle ends automatically.

26. Maintenance and Trouble-Shooting

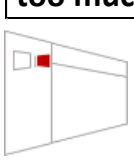
Your new By the Glass® Wine Dispenser is a high-performance and durable appliance for professional use. The device has left the factory in a perfect, tested condition, and the manufacturer covers all electrical and mechanical parts with a 12 months warranty.

To further ensure many years a flawless and hygienic operation, we recommend, in addition to regular care, to conclude a service contract with a licensed service provider. Speak to your dealer about it, or visit us at www.bytheglass.eu for more information.

As with all devices with electrical and with moving parts, despite all care, sometimes interference is inevitable. If malfunctions occur, our contractors worldwide are there to help you with their technical field service.

However, sometimes you will find that you can solve a problem easily by yourself. In the table below we have listed a number of possible troubles that can usually be solved in an easy way. We also listed the simple steps, how to remedy these situations.

Problem	Possible Cause / Solution
The device is turned off, and cannot be turned on.	Is there a problem with the power supply? Is the IEC connector well connected to the terminal on this unit? If the connection cable is damaged, disconnect it, and call service.
Wine dispensing is blocked. One or more LEDs are lit continuously.	Turn the machine off at the main switch, and turn it on again; this will reboot the system.
The light in the chamber is off.	Is the light switched on on the white wine thermostat? Check, if the dimmer on the side or the back of the device is not set wrongly?
Wine cannot be dispensed from any of the taps, or flows very slowly.	Is the gas bottle empty? Check the pressure on the pressure regulator for the inlet pressure. Is the nitrogen line kinked or leaking? Check the pressure on the pressure regulator for the operating pressure.
A single tap is not working. Wine flows only slowly or dribbles.	Check tight seat of the rubber stopper on the bottle. Check if the tap is not blocked. Clean it according to instructions. Is wine sediment clogging the tube? Unplug the bottle, and when the tube is hanging freely in the bottle, press several times a dispensing button, to make the sediment run back into the bottle. Flush the tube with water.
After a short time, the wine is oxidized or has an unpleasant taste.	Was the operating pressure constantly too high? When connecting the bottle, have you forgotten to tap it properly (see Para. 15/5)? Check tight seat of the rubber stopper on the bottle. When connecting the bottle, was the line possibly contaminated with remains of old wine? Flush the tube with water.
Cooling is insufficient.	Check if the vents on the side or the back of the appliance are not blocked. Are the vents possibly clogged with dust? Clean them with a vacuum cleaner.
The compressor is running frequently and/or usually runs for a long time.	Are the sliding doors closed properly? Are they being opened frequently? Are the vents on the side or the back of the Wine Dispenser blocked? Is the ambient temperature very high?
Condensation water in the unit and/or under it.	Is the condensate hose clogged, or blocked by the water level in the collecting container? Is the condensate tube free hanging, and does it lead upwards in the collecting container without being twisted? Is the appliance set-up horizontally aligned?
The gas bottle is empty after a short time.	Is the high-pressure hose firmly attached to the pressure regulator? Is the gas tube connection between the pressure regulator and the device tight, or is there some other detectable leak?
The By the Glass® Wine Dispenser vibrates or makes too much noise.	Is the unit set-up on a level surface? Are the bottles in its interior possibly touching each other?



The card system freezed/ is not responding! Turn off the system using the main power switch or pull the plug. Wait 10 seconds and restart the system. All information on wines, prices, deliveries and sales data will be kept in case of a power outage as well as the temperature settings.

If the problem that you are experiencing is not listed here or cannot be solved, or if you require other technical assistance, please do not hesitate to contact us.

Produced by GS Technik, Jistebnice, Czech Republic
for By The Glass International B.V., Haarlem, The Netherlands
VS 4.8

CERTIFICATE

OF QUALITY AND COMPLETENESS

The producer confirms proper functioning
and completeness of the product.

QUALITY and COMPLETENESS
Stamp, date and signature

Production label
of the product

Your seller:

Your service:

Date
of purchase: .....

Date
of commissioning: .....

By The Glass International B.V.
Energieplein 17 ◦ 2031TC Haarlem ◦ The Netherlands
Tel. +31(0) 235 252 289| Fax +31(0) 235 253 089 | info@bytheglass.eu | www.bytheglass.de