

INSTALLATION & USER GUIDE

WINE SP100 / WineSP10-8 / WineSP100PRO





DEFYING CONVENTION

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Introduction

Thank you for purchasing your WINEMASTER wine conditioning unit – we are sure it will provide excellent temperature control for your wine cellar, wine room, wine wall or wine cabinet.

WINEMASTER (formerly 'Fondis') has been established as the leader of wine cellar temperature control for several decades. The engineering team here at WWINEMASTER is constantly testing the latest materials, technology and engineering processes to manufacture the best units possible. We understand that the end result is all about you, the customer, enjoying your wine and being confident that it is being stored and preserved correctly.

WINEMASTER specializes in wine preservation for many different cellar environments, which is why we have such a wide range of specialist units. All this is backed-up with our WINEMASTER Guarantee and Customer Service from Wine Corner Ltd.

Please read this manual thoroughly to ensure a successful installation, otherwise our 2 year Guarantee will be invalid. All our units are designed to operate in prescribed conditions which are detailed in this manual. If all the conditions and installation instructions are carried out, it is expected the unit will run efficiently for many years to come.

If you need assistance, please contact Wine Corner Ltd on +44 1302 744916 or email info@winecorner.co.uk

Please refer to the Guarantee Exclusions and Limitations on page 22 of this manual for clarification when costs can be claimed.



CHARACTERISTICS

Weight	45 kg (interior) – 15 kg (outside)		
Dimensions	1005 mm x 395 mm x 480 (int) 465 mm 360 mm 480mm		
Setting the temperature	Preset to 12°C, adjustable between 8 and 18°C*		
Maximum outdoor temperature	35°C**		
Cooling power	2500W at 12°C**		
Heating power	1000W		
Electricity supply	230-240V 50Hz with earth connection (supplied with 3m cable)		
Electrical power	1250W		
Gas	R407C without CFC		
Refrigerant gas	1000g		
Length of refrigerant flexible connection	4.50 m or 8 m		

The circuit breaker must be at least 16 Amps.

* The insulation quality and thickness has to be in accordance with the volume of the cellar and the set temperature.

** The cooling performance is dependant from the outside temperature. Therefore, the set temperature of 12°C for the cellar cannot be maintained if the outside temperature of the cellar is maintained at 35°C.

If the thermal safety functions to often, there is a risk for the condensator and starter to be damaged. In all the cases, it must be avoided that the outside temperature remains at $35^{\circ}C$, this high temperature should be limited to the summer period.





1 LAYOUT OF PREMISES

The air-conditioner is composed by two separate units which are connected by an electric and refrigerant flexible cable of 4.55 mts and 8 mts for the SP100-8 models. The distance between the two units cannot be more than 4.5 mts or 8 mts according the models

1.1 INDOOR UNIT

The indoor unit is entirely installad inside the cellar directly on the floor or fixed on the wall with adapted special brackets.

1.2 OUTSIDE UNIT

The outside unit must be fixed on an outside wall in an area free from obstruction which may cause irregular air distribution and/or return in front and back of the unit.

1.3 THE CELLAR

1.3.1 INSULATION

Insulation of the 4 walls, the door, the ceiling and the floor is essential for the Winemaster to work properly. Adequate insulation helps to obtain the stability of the temperature and the humidity.

The board on the next page (choice of insulation) can be used to determine the type and the thickness of insulation needed according to the internal volume of the cellar and a cellar temperature of 12°C. Insulation continuity :

Insulation components must be assembled preferably by interlocking panels or glueing the panels together, to ensure perfect continuity of insulation.

This is very important : it prevents heat and humidity entering from the outside which would counter the effects of regulation.

IMPORTANT

The validity of the **WINEMASTER guarantee depends on the values in the** "Choice of insulation" table being strictly respected, for all the cellar walls, including floor and ceiling + door, as well as perfect continuity of insulation and installation in accordance to the user guide.

1.3.2 CHOICE OF INSULATION

MINIMUM THICKNESS OF INSULATION (mm)for 12°C cellar temperatur					
CELLAR	EXPANDED POLYSTYRENE	EXTRUDED POLYSTYRENE	POLYURETHANE		
VOLUME (m3)	λ=0,044 W/m°C	λ=0,030 W/m°C	FOAM λ=0,025 W/m°C		
14	60	40	30		
16	60	40	40		
18	70	50	40		
20	70	50	40		
22	70	50	40		
24	80	60	50		
26	80	60	50		
28	90	60	50		
30	90	60	50		
32	100	70	60		
34	100	70	60		
36	100	70	60		
38	110	80	60		
40	110	80	70		
42	120	80	70		
44	120	80	70		
46	120	90	70		
48	130	90	70		
50	130	90	80		
60	150	100	90		
70	170	120	100		
80	190	130	110		
90	200	140	120		
100	220	150	130		

1.3.3 WALL AND CEILING INSULATION

The manufacturers propose their insulation panels in several forms :

- insulation alone
 - **"complexes"** : the insulation is lined with a facing (plaster, mineral)

- "sandwiches ": the insulation is lined on each side with a wooden or plaster panel

The panel facing is important : it protects the insulation from shocks and guarantees long life.

Do not use mineral fibre insulation (glasswool, stonewool...) because it stores humidity and loose its insulation capacity.

Protection against rodents

Some insulating materials are damaged by rodents (mice, rats...). It is therefore essential to make sure that the walls of the cellar do not contain holes whichf would allow rodents access to the insulation. This insulation must be lined, on the inner surface of the cellar, with a protective facing. Polyurethane insulation, because of its chemical composition, is not attacked by rodents.

1.3.4 FLOOR INSULATION

The cellar floor must be able to support shelves and the wine stored on them.

You should therefore choose an insulating material with adequate compression resistance for this part. Manufacturers recommend appropriate insulation or materials designed specifically for floor insulation, in their documentation.

Puncture resistance (feet of shelves in particular) is provided :

- in using "complex" insulation panels lined, on the upper surface, with a strong panel.
- by facing the insulation with a panel of chipboard (approx. 15 mm thick), or any other suitable covering plaster and slab, for example

1.3.5 THE DOOR

It is part of the continuity of insulation.

There are two possible solutions :

- to insulate the existing door using the same type as insulation as was used for the cellar walls. Insert a seal such a foam, between the door panel and the frame all around the edge.
- Use a WINEMASTER isothermal door, lined with polyurethane foam. It includes a seal around its periphery, with a magnetic closure..

1.3.6 INSULATION OF OTHER ITEMS

A fridge or another appliance producing heat must not be placed inside the cellar. For example, any hot water pipe going through the cellar must also be insulated.

2 INSTALLING THE OUTSIDE UNIT

Before any intervention with interior of the unit, the electric cable must be disconnected.

Make sure you have chosen the best place for fitting the outside unit :

- Chose the best place in order that the length of the flexible connection will be shorter as possible.
- There should not be any obstacle in front of the ventilation grid and the back of the unit, to facilitate air flow
- The wall structure should be strong enough to carry the unit weight and avoid deformations rupture, or vibration during operation

2.1 DRILLING THE WALL

Drill one hole of diametre 70mm to allow the connection of the flexible refrigerant tube to the unit.

2.2 ELECTRIC CONNECTION OF THE OUTSIDE UNIT



Connect the cable hanging on the indoor unit to the outdoor unit (1)

FLEXIBLE DISMOUNTING 2.3

2.3.1 THE COVER



- •
- Unscrew the two black platic screws **1**. Open the cover like shown on the picture **2**. •

2.3.2 THE FIXING BRACKETS



- Unscrew the 5 screws 1 with a screwdriver PZ2 for unmounting the brackets 2 et 3.

2.3.3 THE REFRIGERANT CONNECTION



- Two wrenches **1** & **2** are supplied with the unit.
- Maintain the connection with the wrenche 1 and unscre with the wrenche 2.

Attention : don't stop unscrewing while gas leaks until the 2 elements are separated. The gas leak will stop then ! Before and during remounting operations, protect the end of the flexible connection in order to avoid dust goes out.

2.3.4 ELECTRICAL CONNECTOR

The ventilator of the outside unit is connected by an electric cable. Disconnect the connector **3**.

2.4 INSTALLATION OF THE OUTSIDE UNIT

2.4.1 INSTALLATION OF THE WALL MOUNTING BRACKETS



2.4.2 ATTACHING THE OUTSIDE UNIT

Before attaching the outside unit, position two nylon washers **1** in the brackets holes.





• Position the outside unit so that the screws and washers 1 are engaged in the slot 2



• To finish, screw the kit screws and washer 1 under the unit.

3 INSTALLATION OF THE INSIDE UNIT

- Put the unit on the floor or on his horizontal support,
- It shouldn't be any obstacle in front of the ventilation grid to facilitate the air flow
- The support or floor must be level and not transmit vibrations.

3.1 <u>RE-CONNECTION OF THE FLEXIBLE</u>

Pass the connecting flexible through the hole in the wall and re-connect the refrigerant fittings with the wrenches and the electrical connecting wires to the outside unit. The reconnection can be done to any pipe. Attention : open the ends of the flexible connection when you pass them through the wall in order to keep the end clean for screwing again.

3.2 INSTALLING THE CONDENSING WATER FLUE



- Screw the plastic bend **1 supplied with the unit**
- Slide the PVC tubing 2
- Screw up the ring clamp 3
- Connect the free end of the PVC tubing to a wastewater point or a retention tank (mini content 25 litres). Avoid "counter slopes " or « siphons »



4 FLEXIBLE CONNECTION FOR THE 4 AND 8M VERSION

4.1 THE COVER



Unscrew the two black plastic screws 1

• Lift cover 2 by rotating it as shown in the drawing.

4.2 THE FIXING BRACKETS



• Unscrew the 5 screws 1 using a screwdriver PZ2 to release the retaining flanges 2 and 3.

4.3 FLEXIBLES INTALLATION ON OUTSIDE UNIT



Put the hoses in place

• BE CAREFUL TO RESPECT THE COLOR CODE ON YOUR MACHINE (blue linked to r blue, red linked to red) (2)

5 CONNECTION AND INSTALLATION OF THE PRO VERSION

5.1 FLEXIBLES

The connections must be made of copper for refrigeration use of diameter 3/8" The 2 connections have the same diameter. Do not exceed a length of 15 meters

5.2 THE COVER



- Unscrew the two black plastic screws 1
- Lift cover **2** by rotating it as shown in the drawing.

5.3 THE FIXING BRACKETS



• Unscrew the 5 screws 1 using a screwdriver PZ2 to release the retaining flanges 2 and 3.

5.4 REFRIGERATION CONNECTION ON INSIDE UNIT



• Solder the copper connections to the fittings. CAUTION RESPECT THE COLOR CODE ON YOUR MACHINE (blue linked to blue, red linked to red)

5.5 REFRIGERATION CONNECTION ON OUTSIDE UNITS



Set up copper connections

• Braze the connections to the fittings. ATTENTION RESPECT THE COLOR CODE ON YOUR MACHINE (blue linked to blue, red linked to red) (2)

Attention, cool the connections well during soldering

5.6 LOADING

The load of R407C must be 1 kg up to a maximum length of 8 meters then 48gr per meter. Do not exceed the length of 15 meters.

The vacuum draw and the filling are done on the indoor unit.



6 USING THE WINEMASTER SP100

The Winemaster SP100 must be installed by complying with the national rules of electric installation

6.1 CONNECTING THE AIR-CONDITIONER

Connect the male plug to a 230/16A power socket. Switch on the air-conditioner by pressing the green button on the back of the inside unit..

The fan on the cellar side comes on immediately.

The compressor may not come on until 2 minutes later if the temperature in the cellar is higher than the set temperature. If the cellar temperature matches the thermostat setting, the compressor will not come on.

6.2 CONTROL PANEL

The setting of the targeted temperature is made on the thermostat :





- Press button one second until the targeted temperature is blinking.
- Use button Use button to increase the temperature
- Use button $\nabla^{\bullet \bullet \bullet}$ to lower the temperature.
- When the right temperature is set, press again on button confirm it.

Explanations of the main display symbols:



« dF » code = <u>manual</u> defrost engaged (see 5.5)

6.3 STANDBY MODE



- Stanby mode : maintain a 3 seconds pressure on button 1. The compressor stops.
- The thermostat indicates « OFF » and also the cellar temperature.
- To come back, maintain again a 3 seconds pressure on button 1.
- The thermostat indicates « ON » during 1 second.

6.4 AUTOMATIC DEFROST

The program of the thermostat from model WINEMASTER SP100 will run an automatic defrost time several times a day. During this position, the compressor stops and only the fan in the cellar is functionning.

The condensate water produced during this period will be vacuated through the tube. The thermostat display the flashing message dF with room temperature.

6.5 MANUAL DEFROST



- The manual defrost is not necessary but can be achieved by a 3 seconds pressure on button 3. The compressor stops
- The thermostat shows « **dF** » and alternatively the wine cellar

temperature <

- To come back, press again during 3 seconds on button 3.
- The thermostat indicates « **ON** » during 1 second

7 SERVICING THE WINEMASTER AIR-CONDITIONER

THE DUST FILTER

It is essential to cleam the dust filter in the air-conditioner every 3 months and replace with a new one at least once a year. If it is clogged, the air-conditioner could be seriously damaged.

7.1 CHANGING THE FILTER



- Unscrew the two plastic screws 1
- Remove the cover 2.
- Pull the tab 3 to release the filter

Replace it with a WINEMASTER filter only ! You can then replace the cover

7.2 INFORMATION ABOUT AIRCONDITIONNER FUNCTIONNING

This airconditionner has a pressostat of high pressure security with manual rearmament and a pressostat of low pressure security with automatic rearmament.

The pressostat of high pressure protects the compressor in case of abnormal rise of the pressure which can be due to several causes (obstruction,filter clogged, breakdown of outside fan unit, local where is the outside unit badly ventilated..)

In the case 1 and 2, the simple rearmament of the device (having deleted the cause) is sufficient. In all other cases, the technician intervention is necessary. The low pressure security protects the compressor in case of some

dysfunctions (icing of the evaporator, bad exchange on the evaporator, too low outside temperature in the starting phase), breakdown of the fan on the internal unit, the absence of coolant fluid consecutive to a leak.

However, as it is an automatic rearmament, in case the problem persists it is better to stop the airconditionner until the technician intervention.



5.1. Overview

WINEMASTER offers a 2 year guarantee against manufacturing defects from the date of purchase. During this period, (subject to inspection by Wine Corner Ltd), WINEMASTER will replace free of charge any defective parts.

Engineer visits, packaging and return costs of faulty or replacement items may be payable by you the client – please check with Wine Corner Ltd first.

The Guarantee applies to the appliance described in this manual. In the event of a malfunction during the guarantee period, the customer may be required to produce the purchase invoice as proof of ownership and the guarantee period. The guarantee is limited to the unit itself, WINEMASTER will not be held liable for any direct or indirect damages resulting from the failure of the air conditioner, ducting or pipework. (Wine collections/stock should be protected by separate specialist insurance.)

Exchange or repair of parts under Guarantee will not extend the initial 2 years guarantee period.

5.2. Exclusions and limitations

The Guarantee does not apply if malfunctions occur due to the following conditions when:

- The insulation, sealing, ambient humidity and ambient temperature of the cellar or wine room does not meet the operating conditions as detailed in this manual.
- The installation of the unit does not comply with the instructions detailed in this manual.
- The unit has malfunctioned or become damaged due to negligence, lack of maintenance (in particular, incorrect use of air filters in terms of regular checks, cleaning and/or replacement)
- The electrical mains supply fails.
- Extreme weather conditions prevail.
- There is a lightning strike.

When unforeseen conditions arise, always contact Wine Corner Ltd for advice first.

