# USER MANUAL Model: DDC'S





# DISPLAY CABINET

 Use and care manual for display cabinet

Included lines: INCLUDES LINES TVC



# USER MANUAL CONTENT



INTRODUCTION	3
SPECIFICATIONS	3
WARNINGS	3
KNOWING YOUR EQUIPMENT	4
INSTALLATION	5
OPERATION	6
USAGE RECOMMENDATIONS	9
MAINTENANCE	10
EQUIPMENT PROBLEMS	12



# **INTRODUCTION** READ ALL INSTRUCTIONS BEFORE USING

# **EQUIPMENT SPECIFICATIONS**

	<b>CABINET.</b> Operating range: 35°F to 50°F (2°C to 10°C)									
Model	Din Height	nension: Width	s Depth	Capacity	Net <sup>1</sup> Weight	Gross <sup>2</sup> Weight	Voltage	Frequency	Amperage	Compressor Power
DDC 40		40.15" 102cm		14ft <sup>3</sup> 396.43 lts	273lbs 124kg	343.9lbs 156kg			5A	1/4HP
DDC 60	46.22" 117.4 cm	57.87" 147cm	36.22" 92cm	21ft <sup>3</sup> 594.65 lts	334.6lbs 151.80kg	425 lbs 192.80kg	115/ 120V	60Hz	5.8A	1/3HP
DDC 80		74" 191cm		28ft <sup>3</sup> 792.87lts	419lbs 190.4kg	499lbs 226.5kg			6.2A	1/2HP

1. Equipment net weight. 2. Equipment weight plus packaging.

# WARNINGS



We recommend the installation of a voltage regulator.



This equipment must not be used by minors or non-qualified personnel.



The equipment contains smalls parts and/or parts that can cause injuries. Do not allow minors to play inside the equipment.



Avoid power strips and/or extension cords.



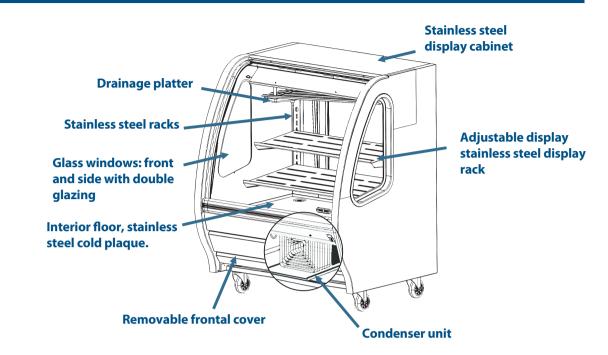
If an assembled piece (non-removable) needs to be removed, please contact an authorized service provider.



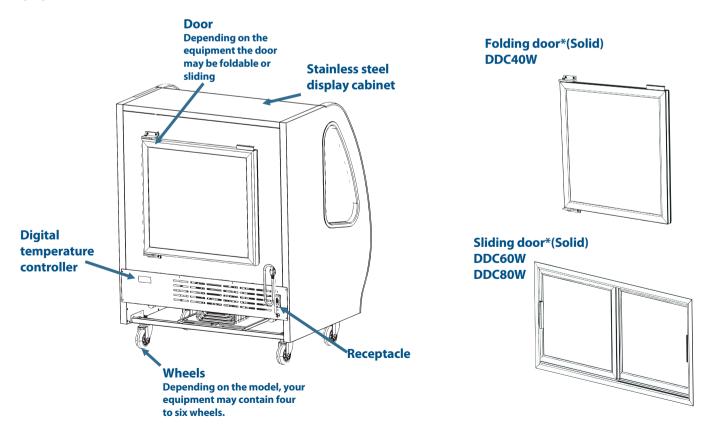
Your equipment is self-contained and does not require installation of drain ines for its proper operation.



### **KNOWING YOUR EQUIPMENT**



# **Equipment back view**



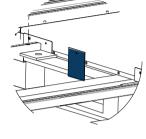


# INSTALLATION

#### Step to remove the floorboard/platform

1) Locate the angles in the interior of the "L" shape floorboard and remove only the upper screew

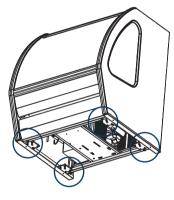




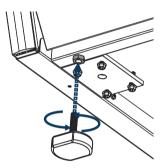
2) Once the screws are removerd you can remove the floorboard. Incline the cabinet to remove the floorboard



Step to install the leveling legs

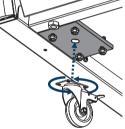


**Leveling leg** 





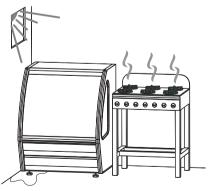
**Heavy Duty Wheel** 



Installation and operation recommendations

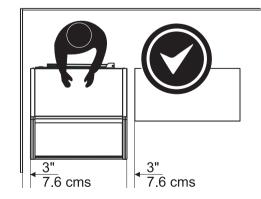
IMPORTANT!: The maximum operating conditions of the equipment are 80.6°F and 65% HR.

Keep the equipment away from heat sources, such as stoves, microwave ovens or direct sunlight.



Keep the equipment away from damp areas.

Layout of the equipment viewed from above.



Leave a space between the sides of the equipment and any wall or object. We recommend a space of 3



# **OPERATION**

This equimpent is configured in order to automatically defrost every 4 hours, however, if the controller needs to defrost before the established period of time, the equipment will do it automatically.

IMPORTANT: It is totally normal to see displayed the message "def" in the controller screen.

Once this period of time finishes, the controller will display the temperature again.



NU.	SHORT PRESS (1 SEC.)	LONG PRESS (3 SEC.)		
1	ILLUMINATION ON/OFF	NO FUNCTION		
2	NO FUNCTION	DEFROST MODE ON/OFF		
3	INCREASE TEMPERATURE REFERENCE POINT	ALTERNATE BETWEEN C° AND F°		
4	DECREASE TEMPERATURE REFERENCE POINT	NO FUNCTION		



### KNOWING YOUR EQUIPMENT

Serves to modify the preset temperature on the inside of equipment. Change the temperature reference point desired:



1. The display will show the current temperature.

2. Press ''increase/decrease'' (button 3 or 4) to access the reference point.

3. Press ´´increase/decrease´´ ( button 3 or 4) to adjust the reference point.

After 30 seconds, the screen will show automatically the current temperature.

NOTE: The wrong reference point adjustment may cause an inadecuate refrigeration, excesive energy consumption, turn alarms on and infractions to sanitation norms in case of food storage. Only a trained technitian must modify parameters.

# **ALARM VISUALIZATION**

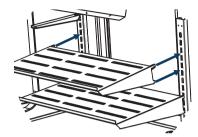
Alarm code	Comments
"Hi"	High temperature alarm
"Lo"	Low temperature alarm
"Con"	Condenser alarm
"dor"	Door open alarm
"uHi"	High voltage alarm
"uLi"	Low voltage alarm
"LEA"	Leakage alarm
"E01"	"S1" sensor failure (short or open)
"E02"	"S2" sensor failure (short or open)
"E03"	"S3" sensor failure (short or open)
"E04"	"S4" sensor failure (short or open)



Problem	Probable cause
Compressor does not start	Waiting for compressor delay timer Defrost in progress Line voltage to compressor too low or too high
Fan does not start	Door is open or door contact is defective
Defrost does not start	Controller in pull down mode
Alarm does not sound	Alarm delayed
Display brightness is weak	Ambient light sensor broken
Shift between ECO and normal mode does not happen on ambient light change	Ambient light sensor broken or light level not set properly
Display alternates between condenser and temperature	Condenser too hot
Display alternates between high and temperature	Temperature too high
Display alternates between low and temperature	Temperature too low
Display shows "dEf"	Defrost in progress

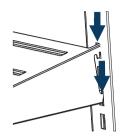


#### **USAGE RECOMMENDATIONS**

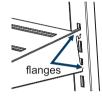


**Display trays:** 

Installation: Insert the tray flanges in the holes of the racks



Once the flanges have been inserted, lower the rack to make it fit



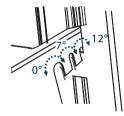
#### Make sure the flanges fit correctly in the rack

Tilt angle and static capacity:

#### Maximum tilt angle:

# Make sure the flanges fit correctly in the rack

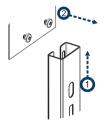




IMPORTANT: The trays can hold a weight of 101.4 pounds (46ks) distributed evenly on the tray

### **Try flanges and racks**

Basic way to remove the racks and the drain tray.



For the central rack, you must remoev the clamp from the hose and the tray.



To remove the rack, you should only slide them up to lift them.

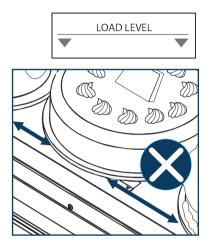
Remove the hose to release the tray, then remove the rack as seen on step1.



#### **Load limit**

Please respect the load limits indicated in the lower part or your equipment in the following tag.

#### LOAD LIMIT TAG





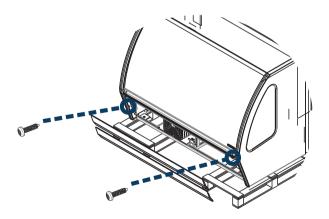
# MAINTENANCE AND CLEANING

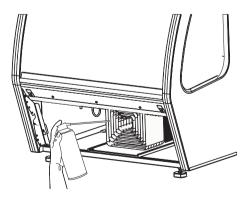
#### **IMPORTANT!**

Please unplug the equipment before doing maintenance or cleaning. Remember to always unplug by pulling the plug. NEVER unplug the equipment by pulling the power cord.

#### **Condenser Access:**

Before beginning this procedure, make sure that the front cover of the equipment is completely clear.





When finished with the maintenance, repeat the steps backwards.

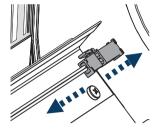


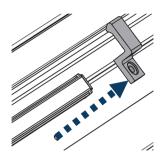
#### **Replace LED strip**

This procedure can be used with the bulbs on the top as well as with the bulbs on the bottom.

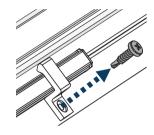
**Unplug the LED strip** 







Remove the support screws (2).

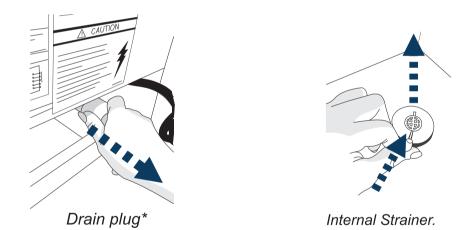


To install the new bulb, repeat the steps backwards

#### Cleaning

Cleaning the inside of the equipment:

Before cleaning the inside of the equipment you must remove the drain plug and the internalstrainers to make sure that the waste or other liquids are drained out of the equipment.



IMPORTANT!: Once the drain plug is removed, the equipment can drain some water. This is normal. Please take the necessary measures to avoid any accidents.

\*The pipes of the equipment are only for convenience while carrying out the cleaning process.

Note: Don't use chemical products with oil, ammonia, chlorine or whiteners. Avoid the use of scrubbers or scouring fibers, do not dry glass with air, always wait for the glass to be warm before cleaning.



# EQUIPMENT PROBLEMS

SYMPTOMS	CAUSE	DESCRIPTIONS
The equipment is not	Connection issues.	Check that the plug is correctly plugged in and
working.		that it does not show any wire damage.
The equipment is not	Poor operating conditions	Plan the entrances and exits of the product
cooling properly.	Many door openings,	inside the unit.
	frequent changes of	
	temperature set point.	
	The unit is too close to the	
	stove or oven.	Change the location of the equipment.
	stove of oven.	change the location of the equipment.
	The unit contains a lot of	Improve the accommodation of the product,
	product.	eliminate big bags and packing and leave open
		space for airflow.
Leakage excess or	Extreme humidity in the	Regularly clean the affected areas, if possible,
condensation on the	environment (rain) or	install a dehumidifier.
outside of the equipment.	coastal area.	
Condensation or ice	- The doors open	Plan the entrances and exits of the product
formation on the inside of	frequently.	inside the unit
the equipment.		
	- The door does not shut	Replace the magnetic seal of the door.
	correctly.	
		It is not necessary to do anything. This is a
	<ul> <li>A defrosting cycle just occurred.</li> </ul>	periodic process for its proper operation.
The equipment is leaking	The holes where the	Apply silicone and/or polyurethane.
water.	harness goes out and the	Apply should and/or polydrethane.
	pipe have no seal.	Correctly adjust the hose or replace it with a new
		one.
	The hose of the tray of the	
	diffuser is obstructed	
	or clogged.	

IMPORTANT!: If the problem continues or another situation that is not mentioned above aries, please contact a qualified technician.



**NOTES** 

# LIMITED WARRANTY STATEMENT 1 Year Parts/Labor Warranty



Prokold Refrigeration, Inc. (hereafter "Pro kold") warrants to the original purchaser of every new Pro kold refrigerated unit (including the cabinet and all parts thereof) (hereafter "Unit") to be free from defects in material or workmanship. The Unit is a commercial Unit intended for commercial and/or industrial use only by trained and qualified personnel. Buyer assumes any and all responsibility for assuring that the Unit is used only by trained and qualified personnel. This Limited Warranty is enforceable only by the original purchaser of the Unit from an authorized Pro kold distributor and may not be enforced by any subsequent purchaser. Further, this limited warranty only covers defects in material or workmanship that arise (1) after proper installation and start-up in accordance with the instruction packet supplied by Pro kold with the Unit; (2) if proper maintenance is performed as specified by Pro kold in its instruction packet and (3) as long as the Unit is subjected only to normal and proper use as provided for in the instruction packet supplied with each Pro kold Unit.

Pro kold's obligation under this warranty is limited to a period of one (1) year from the date of original purchase or fifteen (15) months after shipment date from Pro kold, whichever occurs first.

The sole obligation of Pro kold under this warranty is limited to repair or replacement, including labor charges, of the defective parts, assemblies or unit at Pro kold's sole discretion. The labor warranty shall include (1) standard straight time labor charges only and (2) "reasonable" travel time. "Reasonable" travel time shall be determined by Pro kold on a case-by-case basis.

#### WARRANTY CLAIM PROCEDURE

All claims for labor or parts must be made directly to Pro kold. All claims shall include: (1) model number of the unit: (2) the serial number of the cabinet; (3) proof of purchase; (4) and all pertinent information supporting the existence of the alleged defect. In case of warranty compressor, Pro kold y will either request the compressor or compressor tag be returned to Pro kold y along with above listed information.

Any action for breach of these warranty provisions must be commenced within one (1) year after the cause of the action has occurred.

The product should be delivered in its original packaging or in a packaging affording an equal degree of protection.

Transportation and insurance charges to and from the Pro kold service center, if needed, are not included in this warranty.

#### ADDITIONAL FOUR YEAR COMPRESSOR WARRANTY

In addition to the one (1) year warranty stated above, Pro kold also warrants its hermetically sealed compressor to be free from defects in both material and workmanship under normal and proper use and maintenance service for a period of four (4) years from the date of original purchase but not to exceed 5 (five) years and three (3) months after shipment from the manufacturer. The compressor warranty is subject to any and all of the conditions, prerequisites and limitations of the one (1) year warranty listed above.

Compressors determined by Pro kold to have been defective within this extended time period will, at Pro kold's option, be either repaired or replaced with a compressor or compressor parts of similar design and capacity.

The four (4) year extended compressor warranty applies only to hermetically sealed parts of the compressor and does not apply to any other parts or components, included, but not limited to, cabinet, paint finish, temperature control, refrigerant, metering device, driers, motor starting equipment, fan assembly, heaters, fan assembly or any other electrical component, etcetera.

#### 404A/134A COMPRESSOR WARRANTY

The four (4) year compressor warranty detailed above will be voided if the following procedure is not strictly adhered to:

- 1- This system contains R404A, R22 or R134A refrigerant and Polyol ester lubricant. The Polyol ester lubricant has rapid moisture absorbing qualities. If long exposure to the ambient conditions occurs, the lubricant must be removed and replaced with new lubricant. For oil amounts and specifications please call Pro koldTechnical Support Department (713-691 1195). Failure to strictly comply with recommended lubricant specification voids the compressor warranty.
- 2- Drier replacement is very important and must be changed when a system is opened for servicing. A drier using XH-7 desiccant or an exact replacement solid core drier must be used. The new drier must also be the same capacity as the drier being replaced. Failure to strictly comply with this direction voids the compressor warranty.
- 3- Micron level vacuums must be achieved to insure low moisture levels in the system. 500 microns or lower must be obtained.
- 4- Compressor must be obtained through Pro kold, unless otherwise specified in writing through Pro kold Technical Support Department.

#### WHAT IS NOT COVERED BY THIS WARRANTY



THIS EXPRESS LIMITED WARRANTY IS THE SOLE AND EXCLUSIVE WARRANTY MADE BY PROKOLD REGARDING THE UNIT AT ISSUE. ALL OTHER WARRANTIES, WHETHER STATUTORY, ORAL, EXPRESS OR IMPLIED, ARE EXPRESSLY DISCLAIMED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY AND IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

As provided above, Pro kold's sole obligation under this warranty is limited to either repair or replace parts or unit at Pro kold's discretion, subject to the additional limitations below.

This warranty neither assumes nor authorizes any person to assume obligations other than those expressly covered by this warranty.

- WEAR PARTS: This warranty does not cover wear parts, which due to the nature of the machine, have limited usable life and have to be replaced on a use and wear basis.
- **PERIODIC MAINTENANCE:** Periodic and Recommended Maintenance of the equipment including, but not limited lost parts, misuse and abuse, adjustments, improper installation, and normal wear are not covered under this warranty.
- NO SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES: Pro kold is not responsible for any economic loss, including but not limited to: special, incidental or consequential damages (see Limitation of Liability section) whether or not on account of scale failure.
- WARRANTY IS NOT TRANSFERABLE: This warranty is not assignable and applies only in favor of the original
  purchaser/user to whom delivered. Any such assignment or transfer shall void the warranties herein made and shall void all
  warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose.
- **IMPROPER USAGE:** Pro kold assumes no liability for parts or labor coverage for component failure or other damages resulting from improper usage or installation or failure to clean and/or maintain Unit as set forth in the warranty packet provided with the unit.
- ALTERATION, NEGLECT, ABUSE, MISUSE, ACCIDENT, DAMAGE DURING TRANSIT OR INSTALLATION, FIRE, FLOOD, ACTS OF GOD. Pro kold is not responsible for the repair or replacement of any parts that Pro kold determines have been subjected after the date of manufacture to alteration, neglect, abuse, misuse, accident, damage during transit or installation, fire, flood, or act of God.
- **PREVIOUS REPAIR.** Pro kold shall not be responsible under this Warranty if the Unit has been previously repaired by someone other than Prokold or Warrantor's authorized service personnel.
- **IMPROPER ELECTRICAL CONNECTIONS.** Pro kold is not responsible for the repair or replacement of failed or damaged components resulting from electrical power failure, the use of extension cords, low voltage, voltage drops to the unit.
- NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE: This warranty is
  exclusive and in lieu of all other warranties, including but not limited to the implied warranty of merchantability and the implied
  warranty of fitness for a particular purpose. There are no warranties which extend beyond the description on the face hereof.

#### **REGULATORY LAWS AND/OR STANDARDS**

The performance of the parties hereto is subject to the laws of the United States. The company takes reasonable steps to keep its Units in conformity with various nationally recognized standards and such regulations which may affect its Units. However, the company recognizes that its Units are utilized in many regulated applications and that from time to time standards and regulations are in conflict with each other. Pro kold makes no promise or representation that its Unit will conform to any federal, state or local laws, ordinances, regulations, codes or standards except as particularly specified and agreed upon in writing as a part of the contract between The Buyer and Pro kold. Pro kold prices do not include the cost of any related inspections or permits or inspections fees.

OUTSIDE U.S. and CANADA: This warranty does not apply to, and Pro kold is not responsible for, any warranty claims made on Units sold or used outside the United States or Canada.

#### LIMITATION OF LIABILITY:

Buyer's remedies set forth in this Limited Warranty are exclusive and Pro kold's aggregate liability for any claim of any kind for any loss or damage resulting from, arising out of, or connected with the performance of the Unit or from the manufacture, sale, delivery, resale, repair or use of the Unit whether based on contract, statute, warranty, tort (including but not limited to negligence), fault, strict liability, indemnity, or otherwise shall *in no event* exceed the price allocable to the Unit which gave rise to the claim. In no event shall Pro kold be liable to the Buyer for special, incidental or consequential damages of any kind or nature including, but not limited to: recovery of monetary damages, loss of profits or revenue or business opportunity, loss by reason of shutdown of facilities or inability to operate at full capacity, cost of obtaining replacement equipment, cost of cover or cost to other damaged equipment or property, and repair, replacement, and/or restoration of any materials, equipment, property, or work furnished by anyone other than Pro kold even if it is necessary to repair, replace, restore, remove, damage, and/or otherwise affect such materials, equipment, property, or work in order to complete repairs, replacement, and/or restoration of those furnished by Warrantor.

Pro kold's limited liability under this Limited Warranty is valid and enforceable even if the limited remedy provided in this Limited Warranty is determined to have failed of its essential purpose



www.pro-kold.net