

DONPER ^{USA}

User Manual

D150



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Preface

Thanks for selecting the Donper USA D150 Soft Serve Machine. The purpose of this manual is to provide you with the product specifications and our recommendations for effective and normal operation of this machine in order to ensure and guarantee its service life.

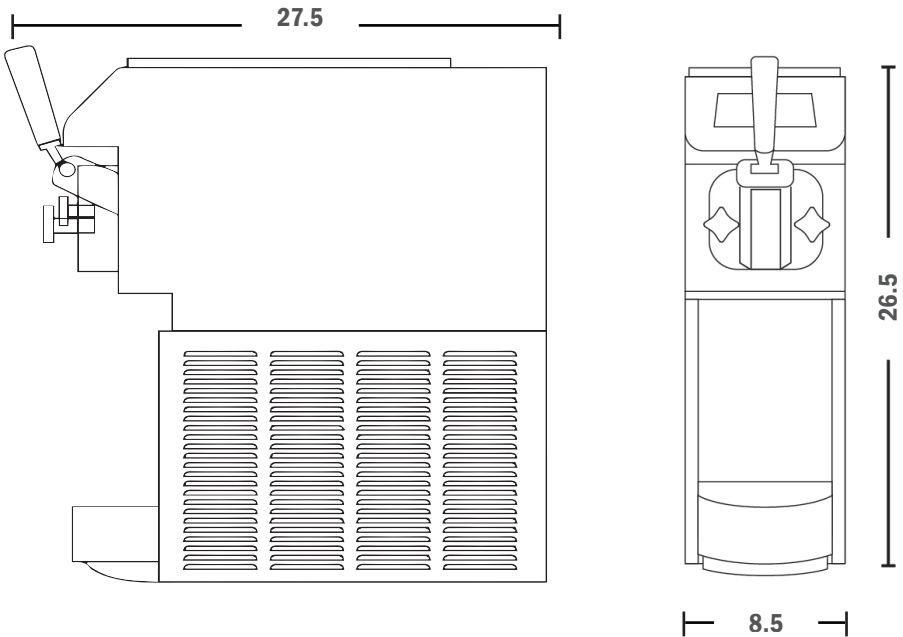
- Before using this machine, please read the product specifications carefully while becoming familiar with this machine.
- Configure the switch board and wire according to the voltage and electric current prescribed by the performance parameter of the machine.
- Pay attention to the ingredients of the raw materials, with the sugar content not less than 13% to avoid abnormal use and damage of the machine.
- Please clean the machine after each use as this will help guarantee the health of everyone.
- Most importantly, enjoy your Donper USA machine with your friends and family then watch their faces light up with amazement. After all, that is what it's all about.

Parameters

In Table 1.1 below, you will find the specs of the D150.

Model	Size (inch)	Voltage	Power	Net Weight	Refrigerant
D150	27.5 x 8.5 x 26.5	115v	500w	90 lbs	R134a

Table 1.1



Precautions

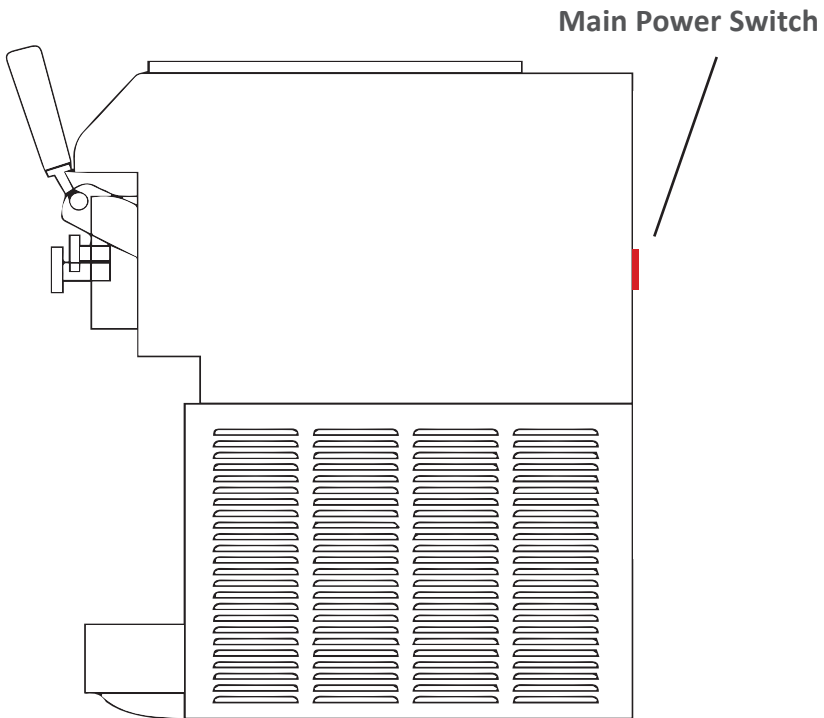
The following is a list of important information that the user of this machine should know prior to operating the machine in order for the machine to maintain its expected service life but more importantly for the safety of the user.

1. The machine shall not be placed upside-down or on any of its sides. The gradient of the machine shall not exceed 30°. The machine shall be kept stable during set up.
2. The machine should be set up in a place without direct sunlight but with good ventilation. The surface where the machine will sit, shall be flat, dry and clean. It is recommended that the environmental temperature shall not exceed 32°C.
3. When lifting the D150, be sure to slide your hands underneath the machine so that the base of the machine is resting on top of your hands. Do NOT attempt to lift and move the machine by holding the dispensing handle as this could cause damage to your machine and possible bodily injury.
4. Do not place any sides of the machine closer than 35cm near any walls to help ensure a well ventilated area and effective operation.
5. Verify whether the power supply will meet the requirements of operation before the installation.
6. The sugar content of your mix shall not be less than 13%. Do not make your mix using saccharin or sodium cyclamate or the wall of the mixing drum will ice up, which can damage the auger and the motor.

Setup

SETTING UP

1. Make sure that the Main Power Switch on the machine is in the off position.
2. Connect the power cord into the wall outlet, and switch the main power switch, which is located on the back of the D150, into the on position.



Operating the Machine

Operating the D150 is all done through the control board. On the control board there are 6 buttons, each of which has its own function. Pressing and holding different combinations of the buttons unlocks different settings which the user can adjust to fit their needs.



SOFT SERVE MODE

1. Pour your soft serve mix into the hopper. Do not continue to add mix past the maximum capacity indicating line inside of the hopper.
2. With the Main POWER switch in the on position, the screen will display 00 on the left side of the display, and the current hardness setting on the right.
3. Press the Soft Serve button to enter into Soft Serve Mode. Once in Soft Serve Mode, the drive motor and compressor will turn on and begin running.

4. With the machine in Soft Serve Mode, the screen will now display the percentage of total hardness that the soft serve is currently at on the left, and the preset Hardness setting of "01" on the right.

Note: Now is a good time to press the Hopper Cooling button to pre-chill the mix inside of the hopper.

5. The Soft Serve is ready when the percentage reaches 99. At this time the compressor will shut off.
6. The machine is now in standby mode. After 5 minutes, the compressor will start, and the drive motor will start a few seconds later.

Note: Pressing the Soft Serve button again will shut down the auger motor and the compressor.

SLUSH MODE

1. Pour your mix into the hopper. Do not continue to add mix past the maximum capacity indicating line inside of the hopper.
2. With the Main POWER switch in the on position, the screen will display 00 on the left side of the display, and the current hardness setting on the right.

3. Press the "SLUSH" button to enter into the slush mode. The current temperature of the freezing cylinder will display on the left side of the screen, and the preset Target Temperature is displayed on the right.
4. The mix will begin freezing inside of the freezing cylinder until the temperature of the freezing cylinder (displayed on the LEFT) reaches the preset Target Temperature (displayed on the RIGHT) plus 5 minutes.

Note: The 5 minutes in which the compressor continues to run after the target temperature is reached, only happens when the mix in your machine is warmer than 0° C.

HOPPER COOLING

This function only can be activated when the machine has been placed in either Soft Serve Mode or in Slush Mode.

1. Press the "HOPPER COOLING" button to activate the Cooling Feature for the Hopper.
2. The screen will now display the current temperature of the hopper on the right side. The hopper will continue to cool until the temperature of the hopper reaches the Preset Temperature for Hopper Cooling.
3. The hopper will begin cooling again once the temperature of the hopper reaches the set Return Temperature for Hopper Cooling.
4. Pressing the "HOPPER COOLING" button again will de-activate the Hopper Cooling feature.

The Instruction of Electrical Setting for D150 Machine

No.	Parameter Name	Code	Range	Default	Unit
IN ICE CREAM MODE					
1	Firmness setting	P0	1--10	1	Class
2	Temperature of hopper cooling in ice cream mode	P1	1--19	4	°C
3	Return difference of temperature of hopper cooling	P2	0--9	2	°C
4	Time delay between drive motor and compressor	P3	5--60	30	Second
5	Restarting time of compressor in ice cream mode	P4	5--15	5	Minute
6	Time delay between fan motor and drive motor	P5	0--60	15	Second
IN SLUSH MODE					
7	Restarting time of compressor in slush mode	P6	0--5	1	Minute
8	Temperature of hopper cooling in slush mode	P7	1--10	5	°C
9	Return difference of temperature of hopper cooling	P8	0--9	1	°C
10	Time delay between drive motor and compressor	P9	0--60	40	Second
11	Extending time for making the slush	PA	0-30	7	Minute

Note for "PA": usually we can not make the slush ready in a very short time, because the sensor will detect that the temperature of mix falls down very quickly, then the compressor will stop working, however, at that time the slush is just getting freezing, not slushy, so we need to extend the freezing time for making the mix slushy, this parameter is for this purpose, you can adjust the freezing time to make the best slush as you wish.

Adjusting the Settings

To access the SETTINGS and make adjustments to them each setting, you will first need to access standby mode. To do so, simply make sure your machine is plugged into its main source of power. Locate the Main Power switch on the back of the machine and switch it into the ON position. Your machine is now in stand by mode. Follow the instructions below to make adjustments for each of the settings.

FIRMNESS SETTING

Press and hold the "UP" or "DOWN" button for about 2 seconds and the word "SET" will begin to flash on the display panel. Press "UP" or "DOWN" to increase or decrease the hardness setting. The range of the hardness setting is from 1 to 10, 1 being the softest setting and 10 being the firmer setting.

While in standby mode, press the "UP" and "DOWN" buttons simultaneously for 5 seconds and "SET" will begin flashing on the display panel and the number on the right side of the display panel will go into the first setting, P1. Press the "SET" button to scroll through the settings below.

SOFT SERVE AND HOPPER SETTINGS

P1 - Preset Temperature for Hopper Cooling

Press "SET" button to enter the P1 setting, press "UP" or "DOWN" to adjust the temperature from -9°C to 9°C, press "SET" button again to save the data and enter into the P2 setting.

P2 - Return Difference of Temperature of Hopper Cooling

Press “SET” button to enter the P2 setting, press “UP” or “DOWN” to adjust the temperature from -9°C to 9°C, press “SET” button again to save the data and enter into the P3 setting.

P3 - Time Delay between Drive Motor & Compressor

Press “SET” button to enter the P3 setting, press “UP” or “DOWN” to adjust the time from 5 to 60 seconds, press “SET” button again to save the data and enter into the P4 setting.

P4 - Compressor Restart Interval

Press “SET” button to enter the P4 setting, press “UP” or “DOWN” to adjust the time from 5 to 15 minutes, press “SET” button again to save the data and enter into the P5 setting.

P5 - Time Delay Between Fan Motor & Drive Motor

Press “SET” button to enter the P4 setting, press “UP” or “DOWN” to adjust the temperature from 5 to 15 minutes, press “SET” button again to save the data and enter into the P1 setting.

SLUSH SETTINGS

To access and make adjustments to settings P6 - PA, you must be in "Slush Mode". Press the "SLUSH" button to enter into the slush mode. Press and Hold the "UP" and "DOWN" buttons simultaneously for 5 seconds, and "SET" will begin flashing on the display panel. Press the "SET" button to scroll through the settings below.

P6 - Compressor Restart Timer

This setting represents the maximum number of minutes which the compressor can be in standby (OFF) before it must restart and begin cooling the freezing cylinder.

For example, the compressor will stay on until the temperature of the freezing cylinder has reached the "Target Temperature" set in the P7 setting. At that time a timer will start, and the compressor will continue to stay on for the number of seconds set in the P9 setting, "Extend Time for Compressor". As soon as that time is reached, the compressor will shut off and go into standby mode for the number of minutes set in this P6 setting at which point the compressor will turn back on and repeat this cycle.

Press "SET" button to enter the P6 setting, press "UP" or "DOWN" to adjust the temperature from 0 to 5 minutes, press "SET" button again to save the data and enter into the P7 setting.

P7 - Freezing Cylinder Target Temperature

Press "SET" button to enter the P4 setting, press "UP" or "DOWN" to adjust the temperature from -9 to 9 minutes, press "SET" button again to save the data and enter into the P8 setting.

P8 - Return Temperature for Freezing Cylinder

This temperature setting is the delta of P7, Freeze Cylinder Temperature Setting, from which the Temperature of the Freezing Cylinder must reach before the the Compressor will turn back on.

For example, if your P7 setting is set to -5°C and this setting is set for 3°C, then when the compressor is in standby it will not turn back on until the Freezing Cylinder Temp reaches -2°C, which is a 3 degree difference from the P7 setting of -5°C.

Press "SET" button to enter the P8 setting. Press "UP" or "DOWN" to adjust the delta return temperature for the cooling cylinder from 0 to 9. Press "SET" button again to save the data and enter into P9 setting.

P9 - Extend Time for Compressor

This setting represents the number of seconds in which the compressor will continue to run once the Freeze Cylinder Target Temperature has been reached, which is set in the PA setting.

For example, if your P7 setting is set to -5°C and this setting is set for 30, as the compressor is running and cooling the freezing cylinder, when the Freezing Cylinder Temp reaches the target temperature of -5°C, instead of the compressor shutting off, it will continue running for 30 seconds, which is represented by the 30 in this setting.

Press "SET" button to enter the P9 setting, press "UP" or "DOWN" to adjust this setting between 0- 60 seconds. Press "SET" button again to save the data and enter into the P6 setting.

PA - Extended Time for Initial Freeze

In the initial freeze cycle, once the temperature sensor has detected that the temperature of the freezing cylinder has reached the Freeze Cylinder Temperature Setting set in "P7", a timer will start and will allow the compressor to stay on for the number of minutes set in this "PA" setting. This will allow the mix in the freezing cylinder to become slushy before the compressor shuts off and the normal freezing cycle begins.

Cleaning Your Machine

1. Make sure you have placed your D150 into standby mode by taking it out of soft serve mode or out of Slush mode.
2. Press the "CLEAN" button on the control panel to activate the auger.
3. Pull down on the dispensing handle to empty out all of the contents from inside the freezing cylinder and hopper then release the handle back into its closed position.
4. Pour clean water into the hopper on your D150, then repeat step 3 in order to empty out all of the water and residual contents of the mix.
5. Continue with steps 3 & 4 until the water that is being dispensed from the machine begins to come back fairly clear.
6. Once the water that is being dispensed from the D150 is fairly clear coming out of the machine, drain all of the water from the D150 completely and then press the "CLEAN" button again and this will shut off the auger and put the machine back into standby mode.

Power down and unplug the power cord from the power source before you continuing.

7. Remove the faceplate by rotating the 2 thumb bolts on both sides of the faceplate counter clockwise.
8. Remove the auger by simple pulling it straight out of the freezing cylinder. Handwash all parts connected to the faceplate and auger using soap and water.
9. Using a warm wet cloth, wipe down the freezing cylinders and the hopper to remove any residual residue.
10. Once all parts are clean, assemble the faceplate and mount it back on to the front of the D150.

STERILIZATION

1. Reassemble the machine back into its original state. Plug machine into power source and power machine back on. Fill hopper with water just above the freezing cylinder and augers. Press the MIX button to activate the rotation of the augers.
2. Add 1 tablespoon of sodium hypochlorite (liquid Bleach) into the water inside of the bowls. Let the auger mix the water and bleach combination and soak for about 10-20 minutes. Drain the water and power down the machine when complete.

3. Wipe down the surface of the machine housing using a wet cloth.
4. Clean the dust inside of the machine regularly. The condenser should be cleaned mainly by sweeping away the dust on the surface of the cooling fan to ensure good refrigeration from the machine. We recommend using a can of compressed air.
5. The machine shall be stored in a clean room with good ventilation when not in use.

This machine is manufactured strictly according to the quality standard. The service life of the machine can be extended by virtue of correct use, maintenance and preservation.

If you have any questions, please feel free to
contact us toll free at (844) 366-7371

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