

# TOSHIBA



## DISHWASHER INSTRUCTION MANUAL

Model:

# DWS-22AHK

Read these instructions carefully before using your  
DISHWASHER, and keep it carefully.

English

# SAFETY INSTRUCTIONS

All instructions described should be carefully read and followed.

- These instructions are precautions to prevent the risks of serious injury or death of the user, and any damages to property.

MARKINGS	
 <b>WARNING</b>	WARNING indicates high possibility of serious injury (*1) or death of the user.
 <b>CAUTION</b>	CAUTION indicates high possibility of injury (*2) or property loss (*3).

(\*1) Serious injury – injury which requires hospitalization, lengthy treatment, or blindness, hot and cold skin burn, electric shock, broken bones or poisoning.

(\*2) Injury – injury, skin burn or electric shock which does not require hospitalization or lengthy treatment.

(\*3) Property loss – extended loss of houses, furniture, domestic animals or pets.

SYMBOLS	
 <b>PROHIBITED!</b>	<p>⊘ <b>PROHIBITED! Indicates prohibited actions.</b> Detailed instructions would be indicated on the inside of the circle or around the symbol in figures or in writing.</p>
 <b>IMPORTANT</b>	<p>● <b>IMPORTANT Indicates mandatory actions.</b> Detailed instructions would be indicated on the inside of the circle or around the symbol in figures or in writing.</p>
 <b>CAUTION</b>	<p>△ <b>CAUTION Recommends to take precautions.</b> Detailed instructions would be indicated on the inside of the triangle or around the symbol in figures or in writing.</p>

## Warning

 Away from children	<ul style="list-style-type: none"> <li>● Do not allow below people to operate the dishwasher The dishwasher cannot be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.</li> <li>● Take care of children and ensure they will not play with the dishwasher.</li> <li>● The packing material may be dangerous to children.</li> </ul>
 No modification	<ul style="list-style-type: none"> <li>● Do not dismantle or modify the dishwasher. This may cause fire, electric shock or fault, and cause injuries. If repair is required, please contact with the vendor of the dishwasher.</li> </ul>
 Electric shock	<ul style="list-style-type: none"> <li>● Use suitable power source according to the power indicated on the dishwasher nameplate. It will cause fire or electric shock. The use of improper power source may cause the socket overheated and cause fire.</li> </ul>

 Disconnect power plug	<ul style="list-style-type: none"> <li>● Before cleaning or maintaining the dishwasher, disconnect the power plug first.</li> </ul>
 No touch by wet hand	<ul style="list-style-type: none"> <li>● Do not connect or disconnect the power plug by wet hand. This may cause electric shock or fault and cause injuries.</li> </ul>
 Electric shock	<ul style="list-style-type: none"> <li>● Do not use damaged power lines, power plug or loose power socket. This may cause electric shock or fault, and cause injuries or fires.</li> </ul>
 No dis-assembly and repair without permission	<ul style="list-style-type: none"> <li>● Do not damage power line. Do not damage, cut, process power line or bend, pull, twist or bind power line. Besides, do not yank the metal part of the power line, or put weights on the line or clamp the power line. The power line may be damaged and cause fire or electric shock. If the power line is damaged, the damaged line must be replaced by the manufacturer or its service agent or personnel having similar qualification, so as to prevent dangers.</li> </ul>
 No water spraying	<ul style="list-style-type: none"> <li>● Do not spray water directly onto the parts of the main body of the dishwasher. This may cause accidents of electric shock or short circuit.</li> </ul>
 Away from flammable materials	<ul style="list-style-type: none"> <li>● Do not put flammable materials into the dishwasher. Do not put flammable materials of kerosene, gasoline, volatile oil, diluent, ethyl alcohol etc. as well as dishes having such matters into the dishwasher. It will may cause explosion or fire.</li> </ul>
 Wipe off dust	<ul style="list-style-type: none"> <li>● Wipe off dust or dirt accumulated on the plug of power line. The accumulated dust or dirt may cause fire.</li> </ul>
 Prohibit	<ul style="list-style-type: none"> <li>● Do not touch the inside of the cabinet, steam jets for during operation or 30 minutes after operation. There is a fear of burning.</li> </ul>
 Instruction	<ul style="list-style-type: none"> <li>● Take out the dishes, clean filters, handle it more than 30 minutes after operation. There is a fear of burning.</li> </ul>
 Prohibit	<ul style="list-style-type: none"> <li>● Do not use extension cord. It may cause fire due to heat.</li> </ul>
 Instruction	<ul style="list-style-type: none"> <li>● If there is abnormality such as the spray arm is not moving, smoke or strange smell, immediately unplug the power plug and stop using the dishwasher. Please ask the agent you purchased for inspection / repair. There is a danger of electric shock, fire by electric leakage or short-circuiting.</li> </ul>

 Insert plug	<ul style="list-style-type: none"> <li>● Insert the power plug securely to the base and let the cord go downward.</li> </ul> <p>If the cord goes upward or if the plug is incompletely inserted, it may cause fire due to electric leakage or heat generation.</p>
 Prohibit	<ul style="list-style-type: none"> <li>● Do not operate by putting easily combustible items such as towels and cloth inside the cabinet of the dishwasher.</li> </ul> <p>There is a fear of fire.</p>
 Instruction	<ul style="list-style-type: none"> <li>● Separate from the heat source such as gas stove 15 cm or more.</li> </ul> <p>There are fears of fires and deformations.</p>
 Prohibit	<ul style="list-style-type: none"> <li>● Do not place anything on the main unit</li> </ul> <p>Do not place heavy objects or hot objects on top of the main unit, such as containers of water or hot water, heat appliances, glasses, electric products, cutlery etc.</p> <p>Falling by opening and closing the door may cause injury. Also, spilled water may deteriorate insulation and cause electric leakage and fire.</p>
 Away from flammable materials	<ul style="list-style-type: none"> <li>● Do not place the dishwasher near fire.</li> <li>● Do not put the burning candle or cigarette on the dishwasher. It may cause fire.</li> </ul>
 Careful installation	<ul style="list-style-type: none"> <li>● Make sure the dishwasher can be set at a smooth drainage location.</li> </ul> <p>The use of dishwasher having poor drainage may cause water to flow back to the dishwasher and cause electric shock or fire.</p>
 Correct grounding	<ul style="list-style-type: none"> <li>● The dishwasher must be grounded.</li> </ul> <p>The current resistance are minimum after grounding, and this can reduce the danger of electric shock when the dishwasher become fault state. The electric wires of this dishwasher have grounding wire and grounding plug.</p> <p>Fault connection of the grounding wire will cause electric shock. When it is difficult to confirm the correctness of grounding, please call for professional electricians or service men for inspection.</p>
 No dis-assembly and repair without permission	<ul style="list-style-type: none"> <li>● Do not change the plug without permission.</li> </ul> <p>When the plug does not match the socket, proper power socket shall be installed by professional electricians.</p>

## ⚠ Caution

 No pulling by force	<ul style="list-style-type: none"> <li>When disconnecting the plug from the socket, do not pull the power line by force. Pull out by grasping the power plug. It may cause electric shock or fault and cause injuries.</li> </ul>
 No use	<ul style="list-style-type: none"> <li>Do not use soap, washing powder or other hand sanitizer. Only dishwashing powder suitable for automatic dishwasher. It may cause machine fault.</li> </ul>
 No washing	<ul style="list-style-type: none"> <li>Do not wash plastic utensils. For plastic utensils, only those marked with safety for the dishwasher or other similar situations, can be washed by the dishwasher. For the plastic utensils without marks, check details with the utensil manufacturer.</li> </ul>
 Application environ- ment	<ul style="list-style-type: none"> <li>Only for indoor use. Such home appliance is for household use, e.g.:           <ul style="list-style-type: none"> <li>- Applications in staff kitchen of shop, office and other working environments;</li> <li>- Farmhouse;</li> <li>- Use for customers in hotel, car hotel and other residence environments;</li> <li>- Environments of inns</li> </ul> </li> </ul>
 No climbing	<ul style="list-style-type: none"> <li>Do not sit or stand on the dish rack or door of the dishwasher. It may cause dangers of injuries due to deformation or damage.</li> </ul>
 Pull off power plug	<ul style="list-style-type: none"> <li>When the dishwasher is not used for long time, pull off the power plug from the power socket and close the dishwasher door. Electric shock or short circuit may be caused due to the degradation of insulating material.</li> </ul>
 Care about the door	<ul style="list-style-type: none"> <li>The door shall keep close, to prevent stumble.</li> <li>It is very dangerous to open the door during washing, and hot water may cause scald.</li> </ul>
 Care for safety	<ul style="list-style-type: none"> <li>When install the items (dishes, utensils etc) into the dishwasher:           <ol style="list-style-type: none"> <li>Be careful to put sharp utensil to prevent it from scratch the door sealing strip.</li> <li>Warning: the cutters and other sharp tools must be put in the basket, and the sharp end is put downwards or horizontally.</li> </ol> </li> </ul>
 Care for cleaning	<ul style="list-style-type: none"> <li>Moisten the soft cloth by mild cleaning solution, then wipe the machine, and wipe it dry by dry cloth.</li> </ul>
 Attention	<ul style="list-style-type: none"> <li>After washing, check if the dishwashing powder is emptied.</li> <li>Firstly, confirm that there is no error or abnormality notification on the panel before using the dishwasher.</li> <li>When installing the dishwasher, use new water hose. Do not use the current water hose.</li> <li>Maximum inlet water pressure is 1MPa. Minimum water inlet pressure is 0.04MPa.</li> </ul>

 Loading capacity	<ul style="list-style-type: none"> <li>Quantity of tableware advised: 22 pieces (soup bowl ×2 +rice bowl×3 +dish×4 +soy source dish×2 +coffee cup ×1 +glass cup×2 +spoon×3 +soup ladle ×1 +rice spoon ×1 +chopsticks×3)</li> </ul>
 Prohibit	<ul style="list-style-type: none"> <li>Do not strongly push open door and main body, nor put the downward pressure to the door. Falling may cause injuries.</li> </ul>
 Attention to pinching of fingers	<ul style="list-style-type: none"> <li>Be careful not to pinch fingers when opening and closing the door. There is a risk of getting hurt while pinching fingers.</li> </ul>
 Prohibit	<ul style="list-style-type: none"> <li>Do not get close to the exhaust port. Steam or hot air may cause the burns.</li> </ul>
 Attention to burn	<ul style="list-style-type: none"> <li>While using or after using the dishwasher, pay attention to hot water drained out. High temperature hot water may come out, there is a risk of burns.</li> </ul>
 Prohibit	<ul style="list-style-type: none"> <li>Prohibit to hit or tap the dishwasher . Electric shock, electric leakage · short circuit may cause fire.</li> </ul>
 Instruction	<ul style="list-style-type: none"> <li>Set the filters correctly. Residues clogs, causing breakdown.</li> </ul>
 Prohibit	<ul style="list-style-type: none"> <li>Do not put light and small dishes such as plastic containers. If it is dropped by water pressure of the water spray, it may cause malfunction due to clogging the dishwasher.</li> </ul>
 Prohibit	<ul style="list-style-type: none"> <li>Do not use for purposes other than dishwasher dryer. It may cause a malfunction.</li> </ul>
 Instruction	<ul style="list-style-type: none"> <li>Make the main unit a solid level surface. Normal operation may not be possible. It may cause water leakage.</li> </ul>
 Instruction	<ul style="list-style-type: none"> <li>Fix the connection of drainage pipe certainly. It may cause water leakage.</li> </ul>

# Treatments

- Handle the package of the dishwasher with extreme care.
- All packages are recyclables.
- Plastic parts are marked with abbreviation of international standard;



PE	Polyethylene, e.g., tableted package material
PS	Polystyrene, e.g., packing material
POM	Polymethyl, e.g., plastic clip
ABS	Polymer, e.g., control panel
PP	Polypropylene, e.g., inner wall

## Warning

- The packing material may be dangerous to children!
- The disposal of package and machine shall be submitted to the recycle center.
- When the machine is not in service, please switch off the power and close the machine door.
- The cardboard package is made by recycled paper and shall be collected for recycling.
- If the generated rubbish cannot be treated properly, they will be harmful to the environment and human health, and they shall be properly disposed to prevent potential threat.



## Warning

- For more details of product recycle, please contact relevant departments of local government or the service center for domestic refuse management.
- Treatment: Please do not treat the product as unclassified municipal refuses. Different refuses have to be subject to special treatment separately.

Such warning sign is used to prevent dangers to you and others.

Please follow it strictly.

After reading, please store it properly for use just in case.

# Contents

---

Please carefully read the instruction manual before using the dishwasher, and this is helpful for the use and maintenance of the product.

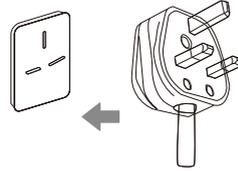
<b>01</b>	<b>Quick instruction manual</b>	09
<b>02</b>	<b>Recognize the dishwasher</b>	
	Dishwasher features	12
	Accessories	12
	Control panel	13
<b>03</b>	<b>Use the dishwasher</b>	
	Install dishwasher bowl basket	14
	Put the dishwashing powder into the addition place	17
<b>04</b>	<b>Program Setting</b>	
	Washing program	18
	Startup	19
	Put additional dishes in	19
	End of washing program	19
	Forced drainage	20
<b>05</b>	<b>Cleaning and care</b>	
	Filter	21
	Filter cleaning	22
	Care and maintenance	23
<b>06</b>	<b>Installation</b>	
	Preparation before installation	24
	Where to place	24
	Power connection	24
	Drainage pipe connection	25
<b>07</b>	<b>Troubleshooting</b>	
	Specification	26
	Before connecting customer service center	28
	Error code	29

# Quick instruction manual

For detailed operation methods, read the manual carefully.

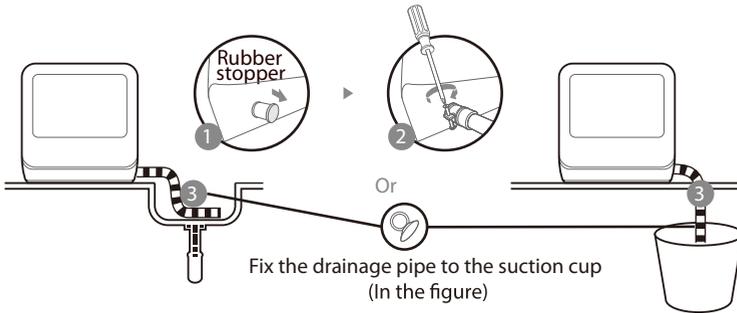
## Connect power

Rated voltage: 220V- Frequency: 50Hz  
Power outlet: 220V-10A



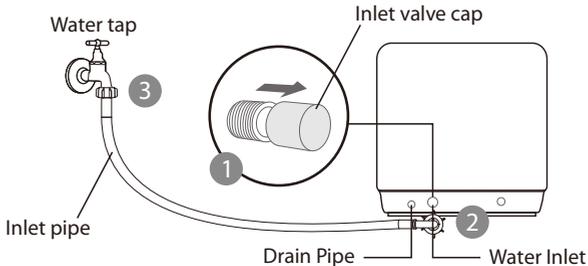
## Connect the drainage pipe

1. Before connecting the drainage pipe, remove the rubber stopper on drainage port at the back of the machine;
2. Put one end of the drainage pipe into the drainage port at the back of the machine, fix the connection with a clamp, and tighten it with a screwdriver;
3. Connect the other end of the drainage pipe to a sink or a bucket.



## Connect the inlet pipe

1. Before connecting the inlet pipe, remove the inlet valve cap from the inlet valve at the back of the machine.
2. Rotating the screw cap to the inlet valve screw.
3. Connecting other side of the inlet pipe to the water tap.



**Attention:** If you choose manual water (by hands) adding way, please keep the inlet valve cap on

## Add water to the dishwasher tank

Turn on the dishwasher by pressing ON/OFF button. Open the tank lid and add water to the dishwasher tank.

There are two ways to indicate that the tank is full

1. Before starting:

When the tank is full, it will beep.

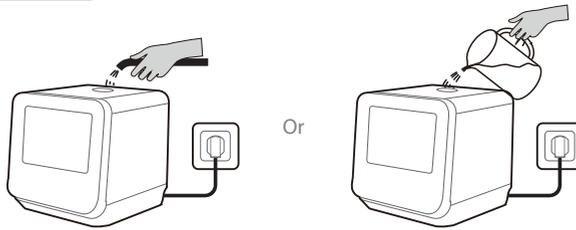
2. After starting:

When the water is insufficient,  the indicator lights up;

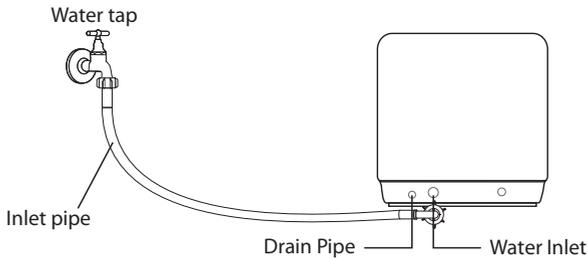
When the water is sufficient,  the light goes off and beeps.

If the water is sufficient,  the indicator still lights up, please contact qualified repairman for help.

### Way 1: By hands



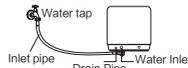
### Way 2: By automatically



**Note:** If the water is insufficient in 3 minutes,  the indicator will be flicking and machine will beep every 1 minute, please check as below:

1. Checking the water tap is opened in automatically adding water way, if so, you should open the water tap and press  button to active the machine again.
2. If there is enough water in water tank, please contact qualified repairman for help.
3. In the first minute after switch on the power, press the button of "Intensive" and "Rapid" together to switch the water inlet mode from "By hand" to "By automatically".

By automatically



By hands



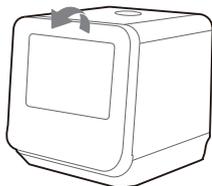
## Remove larger residues

Before putting dishes into the dishwasher, please remove larger residues.

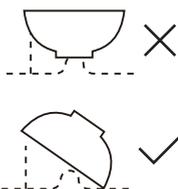


## Open the door, put in the dishes and dishwashing powder

Place them from the two sides to the center according to the size. It is the best to place the dishes at a tilt angle to achieve a better cleaning effect. Improper placement will result in interruption of cleaning process and unsatisfactory cleaning results.

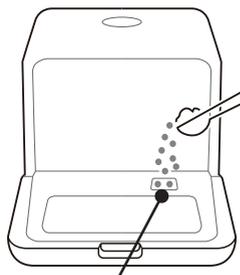


Left side → ← Right side



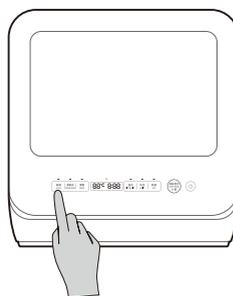
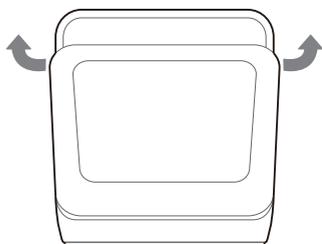
Improper orientation of dishes can also affect the cleaning.

Try to direct the dirty side toward the spray arm.



Put the dishwashing powder at the adding place

## Close the door, turn on the dishwasher, select the program, and press Start/Pause

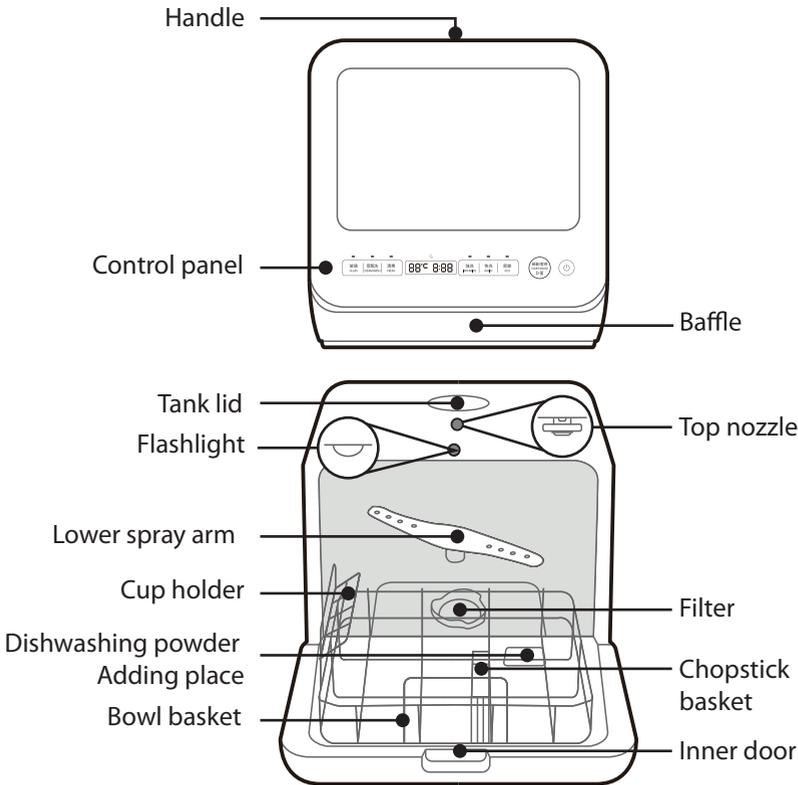


# Recognize the dishwasher

Important:

Before using the dishwasher for the first time, read following instructions to ensure the best results.

## Dishwasher features



### Note:

- When the machine is in power-on or stand-by. If opening the door, Flashlight will turn on automatically. If the door is opened for more than 5 minutes or is closed, the flashlight will turn off automatically.
- When the machine is at working status, if you control the buttons on the panel, the flashlight will turn on automatically. If there is no button control in 5 minutes, the flashlight will turn off automatically.

## Accessories

Water tray, Water kettle, Bowl basket, Chopstick basket, Water tank lid, Drainage pipe, Filtration device, Top nozzle, Lower spray arm.

# Control panel



1	Power	Power on/off
2	Display	<p>When a program is selected, it shows the highest temperature and length of the program. when program starts, it shows the actual water temperature and the remaining time of the program.</p> <p> Water insufficient indicator</p>
3	Program	<p>Select the appropriate washing program and corresponding indicator will light up.</p> <p><b>GLASS</b> For slight dirty dishes and glasses.</p> <p><b>STEAM WASH</b> With the best washing performance. With steam at the first few minutes to soften stains. Have the effect of removing bacteria.</p> <p><b>FRESH</b> Storage: remove odor, moisture, prevent dishes moldy.</p> <p><b>INTENSIVE</b> For dishes with oil stains and heavy dirty cooking utensils and dishes.</p> <p><b>RAPID</b> For slight dirty dishes, the required cleaning time is relatively short.</p> <p><b>ECO</b> For general dirty dishes and utensils (such as pots, plates, glasses, pans) .</p>
4	Start/Pause	To start or pause the washing process of the dishwasher.

# Use the dishwasher

## Install dishwasher bowl basket

### Suggestion

- Purchase dishes suitable for dishwasher.
- Use a suitable mild dishwashing powder. If necessary, consult the manufacturer for more information.
- For special appliances, try to select a washing program that with a lower temperature.
- Do not take out the glass dishes immediately after the program ends to prevent damage.

### Use the dishwashing machine rationally

#### **Not for:**

- Wooden, ivory, porcelain or pearl shank tool
- Non heat-resistant plastic products
- Stale non heat-resistant cutters with glue adhesive part
- Cohesive knives or dishes
- Tin or copper vessels
- Crystal glass
- Rusty steel products
- Wooden utensils
- Synthetic fiber products

#### **Limited use:**

- After several cleanings, some glassware will become dull
- Silver or aluminum products tend to change color during cleaning
- Color of smooth dishes may fade out if often washed

### Precautions before and after the bowl basket is placed

(For the best use of dishwasher, follow the instructions below. For different models, the characteristics and appearance of the basket will be different) Clear larger food residues. Soften the residue of burnt food left on the pan. It is not necessary to rinse dishes with water first. Place the dishes in the dishwasher as follows:

- Cups, glasses, pots and so on are placed face down.
- For curved or concave and convex vessels, place them diagonally so that the water flows out.
- All utensils should be placed safely and must not be overturned.
- All utensils should be placed that the arms can rotate freely during washing.

#### **⚠ Attention**

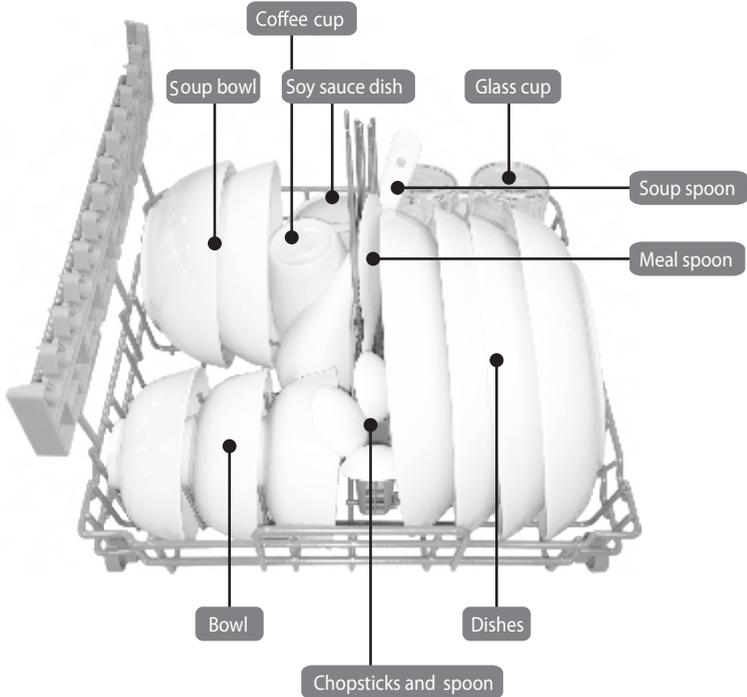
For small objects, it is easy to fall out from the basket, which should not be placed in the dishwasher.

- The open of hollow tablewares (such as cups, glasses, pots, etc.) should face downward so that water does not easily remain in the container or grooves.
- Dishes and knives should not be placed in other utensils, and they can't overlaid each other.
- Do not place glass close to each other to avoid damage.
- For long knives, placing upright is very dangerous.

- Long or sharp knives (eg. meat cleavers) should be placed horizontally in the basket.
- Do not use the dishwasher overloaded so that you can get better cleaning performance.

### **Bowl Basket (with drawing)**

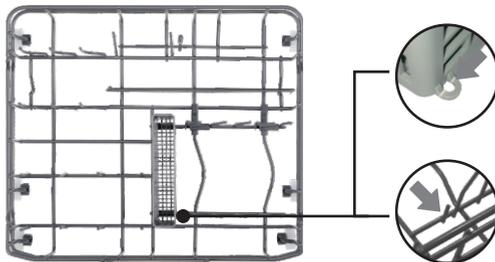
Place the dishes and utensils properly to avoid being moved by the water stream. In order to allow the spray water column to clean the surface, the dirty surface must face inside.



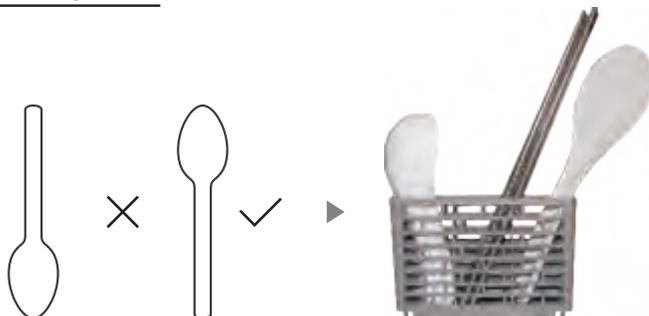
#### **⚠ Caution**

No appliance shall protrude from the bottom. Make sure the sharp tip of tableware face downwards!

Align the hole at the bottom of chopstick basket with the positioning post of rack, and press down firmly to fix it on the rack.



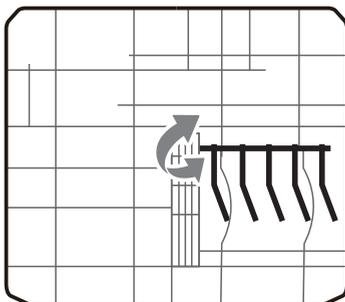
## Chopsticks and spoon



Height is less than 23 cm. Place the tableware upwards. Avoid scratching when placing knives.

\*Knives and other sharp ware must be placed in the basket with the tip down or flat.

## Use of baskets



The basket has an adjustable row. Adjust this row to achieve the best washing results.

## Use of cup holders

The cup holder on the left side of basket can hold small objects such as chopsticks, and can also hold red wine glasses.



For chopsticks



For red wine glass

# Put the dishwashing powder into the addition place

## ⚠ Caution

- Only dishwashing powder is specially designed for dishwashers can be used. Do not use other dishwashing powders to avoid machine damage.
- The dishwashing powder which is corrosive! Keep the dishwashing powder in a place where children cannot reach.



## Concentrated dishwashing powder

According to different chemical compositions, there are two basic types:

- Traditional alkaline dishwashing powder with corrosive ingredients.
- Concentrated weak alkaline dishwashing powder with natural enzymes.

Normal washing programs with concentrated dishwashing powder can reduce contamination and dishes damage.

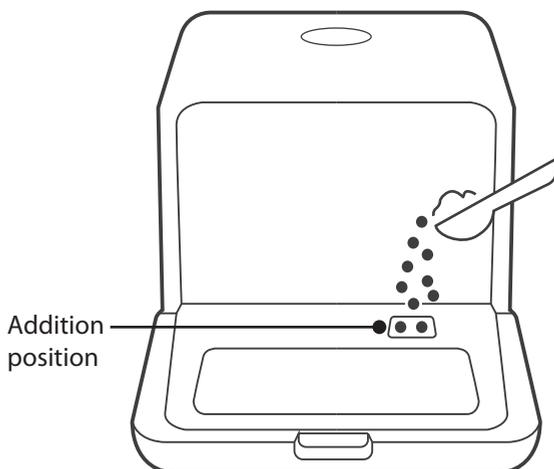
## Cleaning tablets

Different brands of cleaning tablets have different dissolution rates. When using a short-term washing program, there are certain cleansing tablets that cannot completely dissolve and fully function. Therefore, the use of cleaning tablets requires long-term washing programs to ensure complete removal of cleaning tablets.

## Dishwashing powder

Prior to each washing program, re-add the dishwashing powder according to the instructions provided in the washing program table at page 17. Dishwashers use less dishwashing powder than traditional ones. In general, only one spoon of dishwashing powder is required for normal washing and general dirty dishes. Heavy dirty dishes need to add more powder. Please add dishwashing powder before starting the dishwasher, otherwise it will be damp and difficult to dissolve.

## Add the dishwashing powder



# Program Setting

## Washing program

Following table shows best cleaning procedures and amount of dishwashing powder required according to the dirty level of the dishes, as well as the relevant procedure information.

Program	Highest Water Temperature	Dishwashing powder (g)	Time (min)	Power (kWh)	Water (L)
玻璃 GLASS	60°C	6	48	0.42	5
蒸氣洗 STEAM WASH	70°C	6	120	0.5	5
清爽 FRESH	NA	NA	#	0.03	/
強洗 INTENSIVE	70°C	6	89	0.57	5
快洗 RAPID	60°C	6	29	0.34	5
節能 ECO	72°C	6	119	0.47	5

\* Fresh Light on: Fresh run after each program to dry dishes.  
Fresh Light off: No Fresh function run.

# If Fresh is selected to run with each program, when the program finished, Fresh will run for 72 hours to dry dishes. It could be stopped by pressing ON/OFF button or stop automatically after 72 hours.

### Attention

The above program data is for reference only. Test conditions are as follows:

- Washing capacity: 22 pcs (soup bowl×2 + rice bowl×3 + dish×4 + soy sauce dish×2 + coffee cup ×1 + glass cup ×2 + spoon ×3 + soup ladle ×1 + rice spoon ×1 + chopsticks ×3)
- Power consumption at shutdown state and standby state similarly are 0.49w.

## Startup

To start the program:

The plug shall be firstly plugged into the socket. Power supply shall be of 220 VAC 50 Hz type, with socket of 10 A 220 VAC. Before selecting a program, press "ON/OFF" button turn on the dishwasher. Press the button of desired program, the corresponding indicator will light up. Then, pass "Start/Pause" button to start.

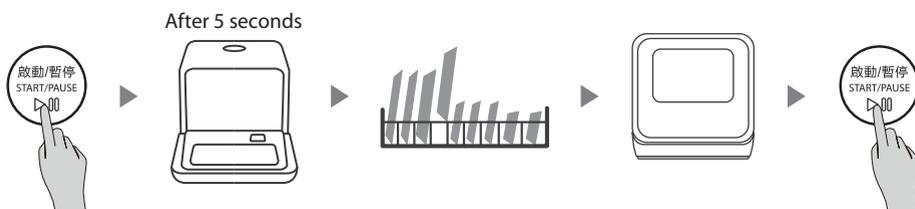
### ⚠ Attention

If you press "Start/ Pause" button in the process of washing, the dishwasher beeps at every 60 seconds until started up again by pressing the "Start/ Pause" button.

## Put additional dishes in

Additional dishes can be placed in at any time before dishwasher program start. If you want to reload dishes in the process of washing, please follow instructions below:

1. Press "Start/Pause" button to pause washing program;
2. Wait for 5 seconds to open the door;
3. Put the additional dishes in;
4. Close the door;
5. Press "Start/Pause" button and after 10 seconds, the dishwasher will start again.



## End of washing program

After the program finishes, the machine shows "End" and the buzzer beeps for 8 seconds. If you want to stop the machine immediately, press ON/OFF button. Then, wait a few minutes to avoid burns before opening the door and clearing the dishwasher. Be careful of hot dishes. Keep the Fresh function on, you will get better drying performance, the fresh function can last 72 hours at most.

- Turn off the machine

Press ON/OFF button to turn off the dishwasher.

- Open the door carefully

Hot dishes are more likely to be damaged. The dishes shall be cool for about 15 minutes and then taken out from the dishwasher.

- Clear the dishwasher

It is normal that the dishwasher still remains wet inside.

 **Warning**

It is extremely dangerous to open the door in the process of washing as this may cause severe burn by hot water.

## Forced drainage

---

In standby mode, you can press and hold "Glass" + "Eco" button simultaneously for 3 seconds to drain the water tank.

# Cleaning and care

## Filter

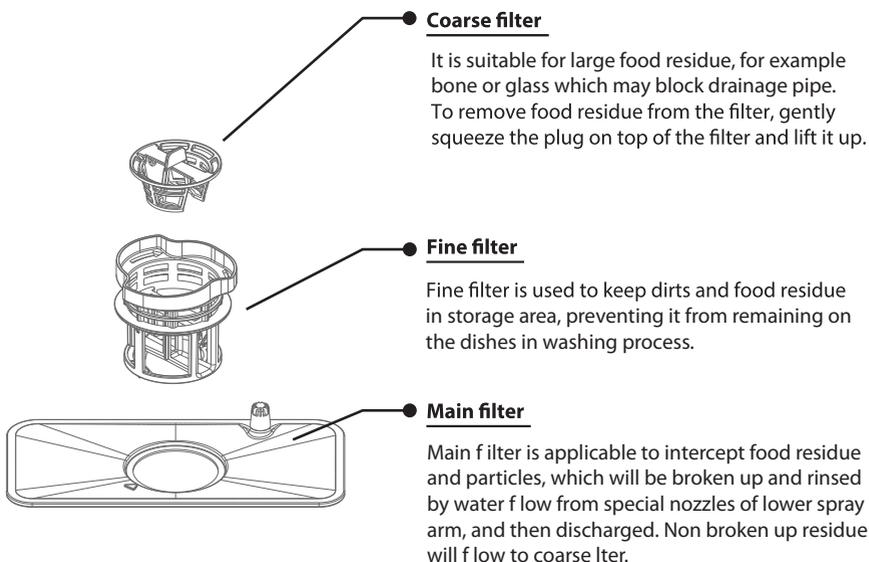
### **Warning**

- Do not use dishwashers without filter!
- Make sure that 3 filters are properly installed. Otherwise, washing performance of the machine may be affected, and utensils and dishes installed. may also be damaged.

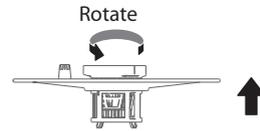
The filters can effectively remove food residue from the washing water, which can be recycled at washing state.

For optimum performance and effectiveness, the filter must be cleaned regularly.

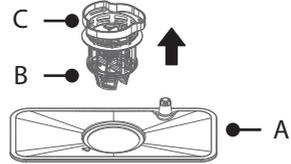
Therefore, when a washing program ends, filter and the cup shall be rinsed under water to remove large food scraps. Remove the filter and pull the cup upwards.



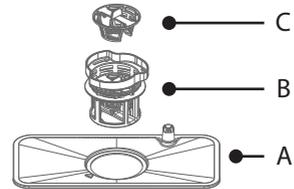
Step 1: Rotate the filters (A, B, and C) in counterclockwise direction and then lift them up



Step 2: Lift B and C from A.



Step 3: Separate B and C.



### **⚠ Caution**

The filters will be removed from Step 1 to Step 3 and installed from Step 3 to Step 1. Entire filters shall be cleaned once a week.

- Check if the filters are blocked after each wash.
- Rotate coarse filter out to remove the filter. Remove all food residues and clean the filter under water.

## **Filter cleaning**

Use detergent when cleaning coarse and fine filters. Reassemble the filters and reload entire assembly into the dishwasher and then position it on its base and press down as indicated in this page.

### **⚠ Caution**

Do not beat the filter in cleaning process. Otherwise, the filter may be twisted, and washing performance of the machine may be affected.

## Care and maintenance

---

Control panel can be wiped with a slightly wet cloth. After cleaning, make sure it is completely dry.

Do not use Sharp tools, Scratch sponge, or Rough detergent anywhere in the machine.

### **Warning**

- Do not use spray detergent to clean the door, as it may damage the door lock and other electrical components.
- Do not use abrasives or rough paper towels, as it may leave scratches or spots on stainless steel surface.

# Installation

---

## Warning



### Electric Shock

The machine shall be installed after the power is off. If not, electric shock or death can be caused.

Please make sure the machine is properly grounded before use.

## Preparation before installation

---

The machine shall be installed close to existing water tap, outlets and socket. It should be close to drain to facilitate connection of drainage pipe.

## Where to place

---

The back of the machine shall be against the wall and for lateral connection, it shall be arranged along adjacent cabinet or wall.

The machine is equipped with a drainage pipe, which allows to be positioned on the left or right side for easy installation. In addition, you may use a water supply pipe other than adding water to the tank. For details, please contact your agent.

## Power connection

---

### Warning

#### Electric Shock

- Do not use an extension cord or power adapter on this machine.
- In any case, do not cut off or remove the grounding connection of power cord.

## Power requirements

---

Please check the label of rated value of power supply system for knowing rated voltage and connect the machine to appropriate power supply. 10A fuse is required and time-delay fuse or circuit breaker is recommended. Only separate circuit is suitable for this machine.

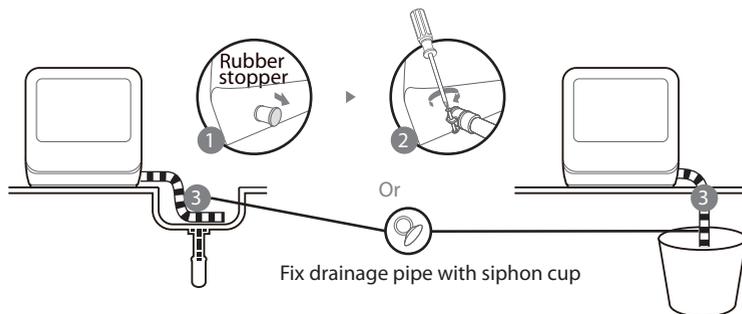
## Machine connection

---

Make sure that supplied voltage and frequency correspond to those on rating plate. Plug can only be connected to a properly grounded socket. If the socket that the machine must be connected to is not suitable for the plug, replace the socket, and do not use a power adapter that may cause overheating and burning.

## Drainage pipe connection

1. Before connecting drainage pipe, please remove the rubber stopper on drainage port at the back of the machine.
2. Put one end of drainage pipe into drainage port at the back of the machine, fix the connection with a clamp, and tighten it with a screwdriver;
3. Connect the other end of drainage pipe to a sink or a bucket



# Troubleshooting

## Before connecting customer service center.

Please check the chart below before connecting customer service center

Problem	Possible cause	Solutions
The machine is not working	Fuse burn-out or circuit trip.	Replace fuse or reset circuit breaker Remove any other appliances that share same circuit with the dishwasher.
	Power is not connected.	Make sure that dishwasher is on and the door is firmly closed. Make sure power cord is properly plugged into the socket.
	Door is open.	Close the door.
Insufficient drainage	Drainage pipe has a knot or is blocked.	Check the drainage pipe.
	Filter is blocked.	Check coarse filter.
	Sink drain is blocked.	Check the sink drain to ensure good drainage. If the kitchen sink drain is not working properly, you shall ask a pipe technician for help rather than a dishwasher qualified serviceman.
Foam remains in liner	Improper dishwashing powder is used.	In order to avoid foaming, only dishwashing powder specially designed for dishwasher can be used. In such case, open the door and allow the foam to evaporate. In case of too much foam, start any washing program for cleaning.
	Detergent overflows.	Wipe off spilled cleaner immediately.
Colors on liner	Use dishwashing powder with coloring agent.	Make sure that dishwashing powder used is free of coloring agent.
White film on liner	Hard water minerals.	Use wet sponge with dishwashing powder and wear rubber gloves for interior cleaning. Do not use any detergent other than dishwashing powder as it may generate foam or bubble.
Rust on dishes	Dishes with rust are easily to be corroded.	Avoid washing dishes that are easily to be corroded in dishwasher.
Crush in dishwasher	Dishes in the rack prevents spray arm from rotating.	Suspend the program and reposition the dishes that prevent spray arm from rotating.

Problem	Possible cause	Solutions
Noise from dishwasher	Dishes are loose.	Suspend the program and reposition the dishes.
Beats in water pipe	This may be caused by site installation or cross section of pipelines.	It has no effect on operation of dishwasher. In case of any doubts, please contact qualified pipe technician.
Dishes remain dirty after washing	Dishes are not placed correctly.	Please see "Bowl Basket" information for details (Page 14).
	The program is not powerful enough.	Select a more powerful program.
	Dishwashing powder is not enough.	Use more dishwashing powder or replace new detergent.
	Placement of dishes affects the rotation of spray arm.	Reposition the dishes so that spray arm can rotate freely.
	Filter assembly is dirty or not properly installed on the base, which may impede the rotation of spray arm.	Clean or properly install the filter and clean spray arm.
Glassware is not glossy	Add too much dishwashing powder under soft water conditions.	If soft water is used, use less powder and select a shorter washing program to clean the glassware.
White point on dishes or glassware	Hard water produces more scale.	Add dishwashing powder.
Black or grey imprints on dishes	Friction between aluminum utensil and dishes.	Use mild detergent to eliminate these imprints.
Dishwashing powder remains in adding position	Placement of dishes hinders the addition of dishwashing powder.	Place the dishes correctly.
Dishes are not completely dry	Placement is improper.	Please see "Bowl Basket" information for details (Page 14).
	Dishes are taken out too early.	Do not take dishes out immediately after the program ends. Slightly open the door let the vapor out and wait until dishes are cool.
	Program is wrong.	When shorter washing procedures are used, washing temperature is lower and cleaning effectiveness is reduced. A longer program shall be selected.
	The dishes have poor drainage ability.	These dishes have poor drainage ability, which are not suitable to be washed in dishwasher.

## Error code

When failure occurs, error code will appear to remind you:

Error code	Code name	Possible cause
E1	Long water intake time	Flow-meters, drain valves, or pump failures shall be repaired by qualified serviceman.
E3	Abnormal heating	Heating pipe or thermistor is at abnormal state, which needs to be unplugged the power plug from the outlet , and needs to be repaired by qualified serviceman.
E4	Overflow or water tank problem	The machine occur overflow or something wrong with the floater in the water tank, needs to be repaired by qualified serviceman.
E9	Abnormal function of operation key	Water or other material on the button will result in abnormal function of operation key, which need to be repaired by qualified serviceman.
Ed	Abnormal communication	Need to be repaired by qualified serviceman.
Ef	No signal of tank full	Abnormal tank floater may cause no signal for tank full, need to be repaired by qualified serviceman.

## Specification

Model	DWS-22AHK
Dimension (mm)	420 (W) x 435 (H) x 435 (D)
Rated voltage	220V-
Rated frequency	50Hz
Rated power	730 W
Water consumption	5 L
Power consumption	0.47 kWh
Control mode	Electronic type
Water-proofing grade	IPX1
Washing capacity	22 pcs (soup bowl×2 + rice bowl×3 + dish×4 + soy sauce dish×2 + coffee cup ×1 + glass cup×2 + spoon ×3 + soup ladle ×1 + rice spoon ×1 + chopsticks ×3)
Total weight	16 kg
Net weight	13 kg