

KEEP THIS MANUAL IN GOOD CONDITION, PLEASE
READ THIS MANUAL CAREFULLY BEFORE USING
THE MACHINE

Softener

User Manual

Model: QS1776-90

QS1776-130

QS1776-200

1. PRECAUTION

1-1 Safety Issues

Please note the following brief icons and rules for safe use of this product



Troubleshooting

When the machine fails, please disconnect the power and water source immediately



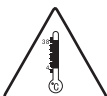
Maintenance

Never remove the parts on the machine to avoid leakage or damage



Avoid contact with children

Never have the machine operated by a child



Temperature

Please use the product in a dry place with the temperature of 4-38°C



Electricity prevention

To avoid leakage of electricity.



Accessories and filters

To maintain the normal operation of the machine, be sure to use accessories and filters supplied by original company



Emergency call

For any help, please call the local sale service center or the national service hotline



Correct repair service

This machine can only be repaired by qualified personnel designated by this company



Avoid direct sunshine

Do not install the machine in a place exposed to direct sunshine

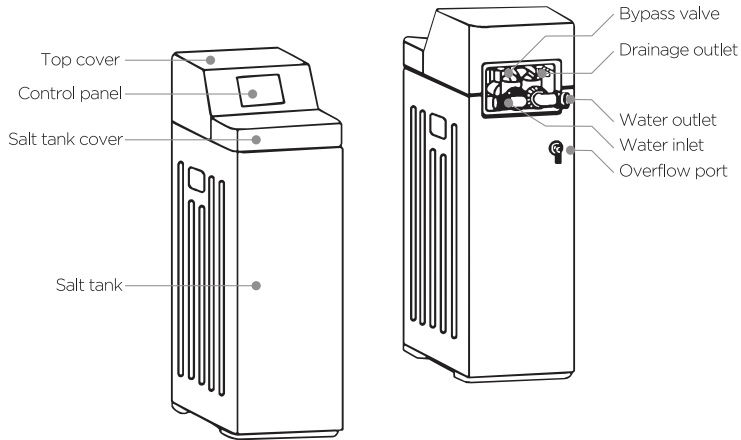


Anti-freeze

Never store or expose the product in an environment less than 0°C

1. This appliance can be used by children aged from 8 years and above if they have been given supervision or instruction concerning use of the appliance in a safe way and if they understand the hazards involved. Cleaning and user maintenance shall not be made by children unless they are older than 8 and supervised. Keep the appliance and its cord out of reach of children aged less than 8 years.
2. Appliances can be used by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
3. Children shall not play with the appliance.
4. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
5. Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
6. This appliance is intended to be used by expert or trained users in shops, in light industry and on farms, or for commercial use by lay persons.
7. The appliance is suitable for indoor use only.
8. WARNING: Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.
9. The appliance must not be immersed.
10. WARNING: To avoid a hazard due to instability of the appliance, it must be fixed in accordance with the instructions.
11. The appliance must not be cleaned by a water jet.
12. The appliance must not be immersed.
13. The new hose-sets supplied with the appliance are to be used and that old hose-sets should not be reused.

2. Product Profile

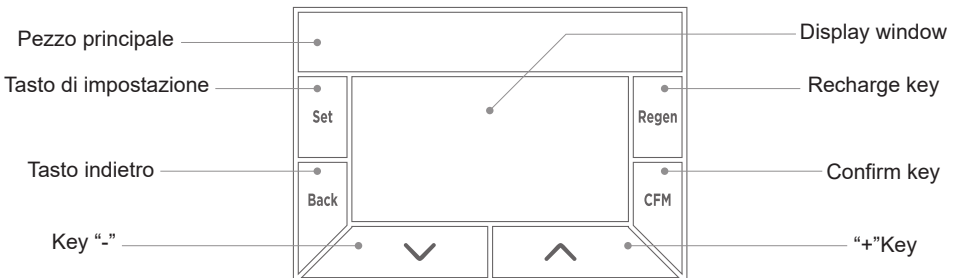


This product can improve the domestic water of user. Its output water is softened water and can be used for bathing, washing clothes, washing dishes, etc. It can also be used for softening the water for industrial boilers, but it is not recommended to drink directly.

Packaging list

Name	Quantity (QS1776-90)	Quantity(QS1776-90 & 1776-130)
User Manual	1	1
Power adapter	1	1
Hose 2m	1	2
3/8" PE tube 2m	1	0
Bypass valve assembly	1	1
Pipe clamp	1	2
Clamp	1	1
Elbow assembly	0	2
Expansion nail	2	2
Screw	2	2

Control panel



3. Installation

Whole Device Installation

Some of the figures in the Manual differ from the real product, please refer to the real product)
The device should be installed by professional technicians of local distribution and service office.

1.Bypass valve, elbow installation

QS1776-90 Model

1. Open the top cover
2. Take out the bypass valve and insert it into the control valve according to the direction.
3. Take out the clamp, insert it into the concentric hole, and press it tight.

QS1776-130/QS1776-200 Model

1. Open the top cover
2. Insert the nut end of the bypass valve into the inlet and outlet of the control valve (note: the arrow on the bypass valve representing the direction of water flow shall be consistent with the control valve), tighten the nut to fix it
3. Insert the elbow nut end into the inlet and outlet of the bypass valve and tighten the nut.

2.Installation of drain pipe

QS1776-90 Model

First, sort the PE pipe, remove the clamp on the drain plug, insert the PE pipe, and fix it with the clamp.

QS1776-130/QS1776-200

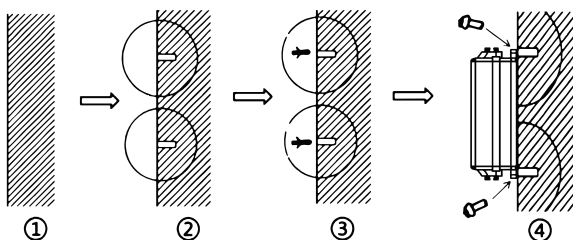
Put the pipe clamp on the hose, then put the hose on the drain elbow, and tighten the pipe clamp to fix the hose.

3.Power adapter and battery installation

Connect the wiring terminal of the power adapter to the power connector of the control valve, secure it with clamp, and then install the top cover.

To ensure safe use of the product, please ensure that the power adapter is fixed:

1. First of all, on the wall or desktop to be fixed according to the adapter buckle to draw the anchor point;
2. To punch holes in the wall or table;
3. Insert the expansion nail into the hole;
4. Screw the adapter and fasten it.



If you have a battery (9V) , remove the top cover and connect it to the valve.

(Note: The battery must be purchased and equipped by the customer. The product does not contain this accessory.)

4. Overflow pipe installation

1. Place the clamp on the hose
2. Put the hose on the overflow elbow.
3. Lock the clamp to fix the hose, and at the same time, tidy the drain pipe and the overflow pipe, and insert them into the drain port such as floor drain and then fix them. At least 40mm clearance should be left between the end of the hose and the drain to prevent siphoning.

5. Water inlet and outlet pipes installation

Connect the inlet and outlet pipes to the elbow of the inlet and outlet of the machine respectively. (Note: The connecting pipes and joints involved in connecting with the inlet and outlet pipes must be purchased and equipped by the customer. The product does not contain this accessory.)

Installation Warning

When connecting the inlet and outlet pipes, please pay attention to the following items:

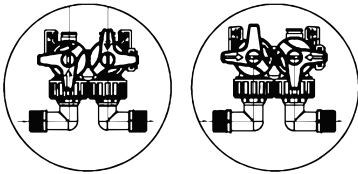
1. Turn off the valve of the indoor main water pipe and turn on the faucet to relieve pressure in the pipe.
2. Make sure that the inlet and outlet pipes are connected to the water inlet and outlet of the machine respectively. Do not install them reversely. Be sure to use the bypass valve.
3. When using the removable hose assembly to connect to water source, be sure to use a new hose assembly and the old hose assembly cannot be reused.
4. If the welded pipe is used to install the inlet and outlet pipes, the welding shall be completed before the pipe is connected with the machine because the heat generated by welding will damage the plastic parts.
5. Wrap the PTFE tape around the threaded connection between the inlet and outlet pipes. Be careful not to make the thread misaligned when tightening.
6. After the inlet and outlet pipes are connected to the machine, they must be fixed so that the bypass valve does not bear the weight.
7. This appliance can be used by children aged from 8 years and above if they have been given supervision or instruction concerning use of the appliance in a safe way and if they understand the hazards involved. Cleaning and user maintenance shall not be made by children unless they are older than 8 and supervised. Keep the appliance and its cord out of reach of children aged less than 8 years.
8. Appliances can be used by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
9. Children shall not play with the appliance.
10. This appliance is intended to be used in household and similar applications such as
 - staff kitchen areas in shops, offices and other working environments;
 - farm houses and by clients in hotels, motels and other residential type environments;
 - bed and breakfast type environments;
 - catering and similar non-retail applications.
11. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
12. The appliance must not be immersed.
13. The appliance must not be cleaned by a water jet.
14. The installation instructions for appliances intended to be connected to the water mains shall specify the means of connection and draw attention to any national rules that may be applicable.
15. The instructions for appliances connected to the water mains by detachable hose-sets shall state that the new hose-sets supplied with the appliance are to be used and that old hose-sets should not be reused.

Commissioning

1. Turn the bypass valve of the machine at the "bypass" position, then turn on the faucet and main water pipe valve near the water outlet to flush the impurities in the pipeline. After flushing, turn off the faucet;
2. Turn the bypass valve in the "working" position and turn on the water inlet valve by 1/4;
3. Manually start the immediate recharge, and quickly switch the valve to the "backwash" position, unplug the power supply;
4. Observe the drain pipe. When the water flow of the drain pipe is stable and there is no bubble, fully turn on the water inlet valve and keep "backwash" for about 5 minutes;
5. Supply power, press the Confirm key to switch the valve position to the forward washing position, let the program finish automatically, and return to the standby state;
6. Turn off the faucet and check for leaks at all joints. If there isn't leakage, add salt into the salt tank;
7. According to the actual local situation of the machine, set the parameters, and start immediate recharge after the setting is completed. After the recharge is completed, the machine can be used normally.

Note: The position of the handle when the bypass valve is in the working or bypass position is as follows:

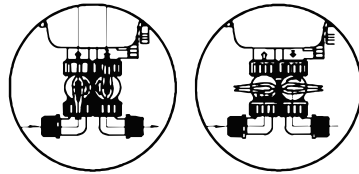
QS1776-90 Model



Working position

Bypass position

QS1776-130 / QS1776-200Model



Working position

Bypass position

Run Warning

1. When there is a low salt alarm, timely add salt into the salt tank and set the salt amount in the salt tank;
2. In the humid areas, the salt tank should be regularly inspected for salt bridge. If salt bridge is formed, it must be broken in time to avoid affecting the performance of the machine.

4. Usage Instructions

Startup

1. Turn on the power and the display lights up.
2. The time icon on the standby interface flashes to remind the user to set the current time. After the current time is set, return to the standby interface and the time icon stops flashing.
3. The standby interface and the low salt alarm interface are alternately switched. At this time, add salt into the salt tank, and set the salt amount and then return to the standby interface.

Notes:

1. When supplying power for the first time or supplying power after cutting off power supply for a period, the time icon will flash, indicating that the current time must be reset.
2. When supplying power for the first time or supplying power after cutting off power supply for a period, you need re-set the language. You can press the "Back" key and "+"key together to choose the language on the home page.
3. When supplying power for the first time or after working for a period of time, the low salt alarm interface pops up. It is necessary to add salt into the salt tank in time and set the current salt amount.
4. Note: This product don't have stand-by mode or off state, not applicable for CE ERP certification.

Time setting

1. In the standby status, press Set to access the main menu.
2. Select the set current time in the main menu, press the Confirm key to enter the set current time interface.
3. Adjust the "+/-" key to set the five parameters of year, month, day, hour and minute respectively. After setting one parameter, press the Confirm key to save and then enter the next parameter setting. After setting the current time, press the Confirm key to save and return to the main menu.

Salt level setting

1. In the standby status, press Set to access the main menu.
 2. Select the salt level setting in the main menu, press the Confirm key to enter the salt level setting interface.
 3. Observe the actual salt level in the salt tank, adjust the "+/-" key to set the salt amount, and make it consistent with the actual. After setting the salt amount, press the Confirm key to save and return to the main menu.
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1. Press the Confirm key in the low salt alarm interface to enter the salt amount setting interface.
 2. Observe the actual salt level in the salt tank, adjust the "+/-" key to set the salt amount, and make it consistent with the actual. After setting the salt amount, press the Confirm key to save and return to the main menu.

History records query

1. In the standby status, press Set to access the main menu.
2. In the main menu, select History Records Query and press Confirm to enter the query interface.
3. In the History Records Query interface, press the "+/-" key to check the peak flow rate, today's water consumption, daily average water consumption, and accumulated water consumption. In the History Records Query interface, press the Back key to return to the main menu.

System configuration query

1. In the standby status, press Set to access the main menu.
2. In the main menu, select System Configuration Query and press Confirm to enter the query interface.
3. In the System Configuration Query interface, press the "+/-" key to check the system configuration information of the product. In the System Configuration Query interface, press the Back key to return to the main menu.

5. Recharge

Recharge tonight

1. Press the Recharge key in the standby interface to enter the Recharge Setting interface.
2. Select recharge tonight, press the recharge key to enter the state of recharge tonight.
3. In the recharge tonight state, the standby interface and the recharge tonight countdown interface will be alternately displayed in the display window; when the set recharge time is reached, the machine will automatically start once complete recharge.
4. After the recharge is completed, the machine automatically returns to the standby interface; in the recharge tonight state (before reaching the set recharge time), press the Back key to return to the standby interface.

Immediate recharge

1. Press the Recharge key in the standby interface to enter the Recharge Setting interface.
2. Select immediate recharge, press the Confirm key to enter the immediate recharge countdown interface.
3. Press the Back key before the countdown is 0 to cancel the recharge and return to the standby interface; otherwise, once complete recharge will be initiated (it cannot be cancelled once the recharge is started).
4. During the recharge process, press the Confirm key, the machine will immediately proceed to the next step from one step of recharge. Return to the standby interface after recharge is completed.

Notes:

1. During the recharge process, the text representing the current recharge step will be displayed in reverse;
2. When the text is flashing, it indicates that the machine is switching to the current recharge step;
3. When the machine is switching between recharge steps, the Confirm key is disabled;
4. When the control valve is equipped with backup battery, if the recharge bit is de-energized, the control valve returns to the working position after completing the current recharge step; if power is cut off when switching the recharge bit, the battery will drive the control valve to continue the switching and then return to the working position after completing the recharge step; after power-on, it continues to complete the subsequent recharge steps;
5. When the control valve is not equipped with backup battery, the control valve will stop at the power-off position when the power is cut off. If the recharge bit is de-energized, the control valve automatically finds the position at the time of power-off after power-on. After completing the recharge step at the time of power-off, the subsequent recharge step is continued; if power is cut off when switching the recharge bit, the control valve will automatically find the recharge step to be switched after power-on, and complete the subsequent recharge step.

Cautions

In order to ensure safe use and prevent physical injury and property loss for you and others, please obey the following cautions, otherwise, it may possibly cause accident.

Prohibited

- This product is used to reduce water hardness, and its output water is not recommended for direct drinking.
- Avoid storing or exposing the device in the environment lower than 0 °C.
- After the water is shut down or the pipeline is repaired, it is necessary to drain the sediment and sand from other water pipes, otherwise, a large amount of sediment and sand may cause the machine to malfunction. When the inlet water doesn't meet the municipal tap water standard, includes high content of sand and mud in water, residue chlorine exceeds the standard, etc. please install pretreatment device in front of this product.

- Avoid using and storing the product in the following places: places exposed to strong sunlight, which may cause aging of product components; places with temperature below 4 °C or above 38 °C, which may damage the filter material; place with high temperature or strong magnetic equipment nearby, which may cause fire, product damage or circuit failure; The damp or dusty environment may possibly cause device damages.
- Children is not allowed to operate, contact, approach or climb on the product, children and intellectual disabilities should use the product with the support of guardian.
- Please do not connect the power plug with step-up transformer.
- When cutting off power supply, please do not directly pull the power cable for avoiding damage.

Compulsory

- This product is used to soften the municipal tap water. The best working pressure of this device ranges 0.14-0.35 MPa, please install corresponding pressure increasing or decreasing device if the water pressure is lower or higher than this level.
- When the device is faulty, please quickly cut off power, and turn the bypass valve to the bypass position, and contact the local service office.
- The device must be installed or relocated by professional technician, it will easily damage the product or cause the danger of electric shock if the components of the device are dismantled by yourself, it will easily cause improper operation if the device is moved or conveyed by yourself, which may result in device damages.
- Install the machine as close as possible to the floor drain. There should be enough clearance between the machine drain pipe and the floor drain to prevent siphoning
- When not using the product for a long time, it is recommended to disconnect the power supply and turn the bypass valve to the bypass position
- When using the machine for the first time or after it has been stopped for a long period, please manually rinse the recharge resin.
- One 220V power socket is required in the 1.5m range of the device, supply power to the adapter. Adapter power cord length is 1.5m. Please ensure that the power socket and adapter are at indoor for protecting the product from damp weather.
- This product has automatic recharge function. Do not frequently power off or unplug the power cord.
- When supplying power for the first time or supplying power after cutting off power supply for a period, the time will flash, indicating that the current time needs to be set.
- Check the salt amount in the salt tank during the operation of the machine.
- Please do not put heavy object on the device.
- In order to ensure the normal operation of the product, please be sure to use the components, softening resin and adapter provided by our company.
- Please keep the power plug clean, and do not operate the plug with wet hand. The fixed line connected to this product must be equipped with an all-pole disconnect device.
- Please do not approach combustible and volatile substance to this device.
- Please clean and regenerate regularly.
- The overflow pipe and the drain pipe must be those provided with the machine, it is not allowed to increase the pipe length and reduce the pipe diameter without permission.
- It is strictly forbidden to combine the overflow pipe and the drain pipe into one pipe and connect to the drain port.

Basic parameters

Model	QS1776-90	QS1776-130	QS1776-200
Purified water flow rate	1m³/h	1.5m³/h	2m³/h
Recharge cycle	1.7m³/h	2.3m³/h	3.4m³/h
Rated total purified water amount	10200m³	13800m³	20400m³
Efficient resin capacity	9L	12L	13L
Rated voltage/Frequency	220V/50Hz		
Rated power	2W		
Working pressure	0.14-0.35MPa		
Inlet water temperature	4-38℃		
Applicable water quality	Municipal tap water		
Specification of water inlet and outlet port	3/4" external thread	1" external thread	
Product dimension	430x270x535mm	455x270x835mm	455x270x1116mm

Factory Setting

Content		Value Setting Range	Factory Preset			The minimum increase and decrease value
			QS1776-90	QS1776-130	QS1776-200	
Current time	Hour	00-23	08	08	08	1 hour
	Minute	00-59	00	00	00	1 minute
	Month	01-12	1	1	1	1 month
	Date	01-31	1	1	1	1 day
	Year	2000-2039	2017	2017	2017	1 year
Hardness of inlet water		10-800PPM	200	200	200	10PPM
Salt level setting		0-70kg	0	0	0	1kg
Fe ion content of inlet water		0-5PPM	0	0	0	0.1PPM
Recharge time		00:00-23:00	02:00	02:00	02:00	1 hour
Recharge interval days		0-15 days	0	0	0	1 day
Salt dissolving duration		2-9 hours	2 hours	2 hours	2 hours	1 hour
Backwash duration		0-99 minutes	3 minutes	4 minutes	7 minutes	1 minute
Forward washing duration		0-99 minutes	1 minute	1 minute	2 minutes	1 minute
Low salt alarm sound		ON/OFF	ON	ON	ON	/
Vacation mode		ON/OFF	ON	ON	ON	/
Flushing cycle		0-10 days	4 days	4 days	4 days	1 day
Maintenance cycle		0, 26, 52, 78 weeks	0	0	0	/
Product model		QS1776-90 QS1776-130 QS1776-200	QS1776-90	QS1776-130	QS1776-200	/

Cleaning and Maintenance

1. This product is periodically maintained by the professional technicians of our company, and the filters are replaced by our technicians for ensuring the quality of output water.
2. When cleaning the product, please do not use soap, detergent and strong volatile solvent such as thinner, gasoline and alcohol, otherwise, it may possibly cause crack, scratch and color changing.
3. Please do not directly spray water to clean the device.

Check the Abnormal Phenomenon by Yourself

The followings are the identification and check of common abnormalities, if it can't be removed through simple treatment, please send it to the repair office or consult our customer service hotline. Do not dismantle and repair it by yourself for avoiding danger or water softener damage.

Phenomenon	Possible Reasons	Solutions
No soft water	No salt in the salt tank (or generating salt bridge)	Add into salt, or break the salt bridge, manually operate the immediate recharge.
	The bypass valve is in the bypass position	Place the bypass valve in the working position.
	Drain pipe is entangled	The drain pipe must not be entangled, sharply bent or raised beyond the position of the water softener.
Sometimes hard water is produced	Hardness value is set too low	Reset the water hardness to match the actual hardness.
	Water softener consumes water during recharge	Avoid water consumption during recharge, because the water used at this time may not be softened by the resin layer, and the water used during recharge may cause insufficient recharge.
	Hardness increased when feeding water	Set a new hardness value.
Display window displays (E1)	Water inlet flow rate is too high	Reduce water inlet flow rate or selects the water softener of appropriate rated flow rate
Display window displays (E2)	Gears failure. Motor doesn't stop	Press "confirm" to reset If it failed, please contact seller
Display window displays (E3)	Motor failure. Lost light signal during motor working.	Press "confirm" to reset If it failed, please contact seller
Display window displays (E4)	Motor failure. No light signal.	Press "confirm" to reset If it failed, please contact seller
Display window displays (E5)	Transmission abnormal during backwash.	Press "confirm" to reset If it failed, please contact seller

Note: Display window displays (E4) not applicable for JL1776-130 & JL1776-200

Instructions on Components Maintenance

In order to keep this device under good working state, the table below lists out the list of key components, these components may gradually loss the original effect or property as a result of jamming, saturation and ageing, which may result hidden safety troubles, please timely maintain and replace the key components.

S/N	1	2	3	4	5	6	7
Variety	Electric control	Electric control	Electric control	Consumables	Valve	Water storage container	Pressure bearing vessel
Name	Control valve	Control panel	Power adapter	Resin	Salt valve	Salt tank	FRP tank
Reason of Failure	Jamming	Fatigue, ageing	Fatigue, ageing	Jamming, poisoning	Jamming	Fatigue, ageing	Fatigue, ageing
Maintenance Cycle	36 months	36 months	30 months	Periodically maintain and replace the resin according to local water quality.	36 months	60 months	60 months

Notes:

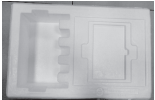
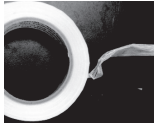
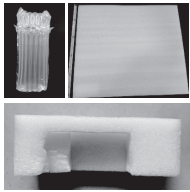
If the supply cord is damaged, it must be replaced by the manufacturer, it's service agent or similarly qualified persons in order to avoid a hazard. The new cord must supplied by the manufacturer or it's maintenance.

The packaging material used is recyclable; we recommend that you separate plastic, paper and cardboard and give them to recycling companies. According to WEEE (Waste of Electrical and Electronic Equipment) guidelines, waste from electrical and electronic devices should be collected separately. If you need to dispose of this appliance in the future, do NOT throw it away with the rest of your domestic garbage. Instead, please take the appliance to the nearest WEEE collection point, where available.



Environmental label of packaging

In accordance with Decree No.116/2020.We communicate to consumers the guides for the classification and recycling of packaging.

	Image	Item	Classification	Collection group
HDPE		Bag / PROTECTIVE FILM	HDPE 2	PLASTIC COLLECTION
Corrugated fibreboard		Package box / Accessory box	PAP 20	PAPER COLLECTION
Polypropylene		Packing belt / ADHESIVE TAPE	PP 5	PLASTIC COLLECTION
EPS		TOP FOAM	PS 6	PLASTIC COLLECTION
Polyethylene terephthalate		Adhesive tape	PET 1	PLASTIC COLLECTION
Low density polyethylene		Air bag / Protective pad / Protective pad	LDPE 4	PLASTIC COLLECTION
Paper and fibreboard /plastic		Bottom tray	PAP 20	PAPER COLLECTION
			PS 6	PLASTIC COLLECTION

This list is for reference only.

Please refer to the packaging materials.

Check the disposal methods with the Municipality to which you belong.

