

Instruction manual

VWR A-1000/A-1100/A-1200

Sipper/Temperature Control System

European Catalogue Number

EU/UK/CH Plug: 634-1152

**A-1100 CONTROLLER, SIPPER FOR
UV1600PC, UV-3100PC, V3000PC, UV6300PC**

EU/UK/CH Plug: 634-1153

**A-1000 CONTROLLER, SIPPER WITH
CONSTANT-TEMPERATURE FOR
UV1600PC, UV-3100PC, V3000PC, UV6300PC**

EU/UK/CH Plug: 634-1154

**A-1200 CONTROLLER,
CONSTANT-TEMPERATURE FOR
UV1600PC, UV-3100PC, V3000PC, UV6300PC**

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Legal Address of Manufacturer

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Safety Information

Please follow the guidelines below and read this manual in its entirety to ensure safe operation of the unit.

We recommend against the use of A-1000 Constant Temperature/Automatic Injection System.

	• Do not open the device. • Disconnect the device from the mains supply before carrying out maintenance work or changing the fuses. • The inside of the device is a high-voltage area Danger! • Do not use the device if it is damaged, especially if the main power cable way is in any damaged or defective. • Repairs may only be carried out by the service technicians from your authorized contractual partners. • The device must be connected to a power outlet that has a protective ground connection. • If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
	• Do not allow any liquid to enter into the device. • Do not operate the device in a hazardous location or potentially explosive environment.

Package Contents

Configuration list of A-1000

Description	Quantity
Constant Temperature/Automatic Injection Controller	1PC
10mm Single Cell Holder with Constant Temperature	1PC
10mm Flowing Quartz Cuvette	1PC
Silicone Pipe with Limit Ring (1m, Inner hole diameter: $\phi 2$, Outer diameter: $\phi 4$)	1PC
Silicone pipe (700mm, Inner hole diameter: $\phi 2$, Outer diameter: $\phi 4$)	1PC
Constant Temperature Control Cable	1PC
Power Cords (EU/UK/CH Plug)	1PC
Instruction Manual	1PC

Configuration list of A-1100

Description	Quantity
Automatic Injection Controller	1PC
10mm Single Cell Holder	1PC
10mm Flowing Quartz Cuvette	1PC
Sample Chamber Baffle (including injection hole)	1PC
Silicone Pipe with Limit Ring (1m, Inner hole diameter: $\phi 2$, Outer diameter: $\phi 4$)	1PC
Silicone pipe (700mm, Inner hole diameter: $\phi 2$, Outer diameter: $\phi 4$)	1PC
Power Cords (EU/UK/CH Plug)	1PC
Instruction Manual	1PC

Configuration list of A-1200

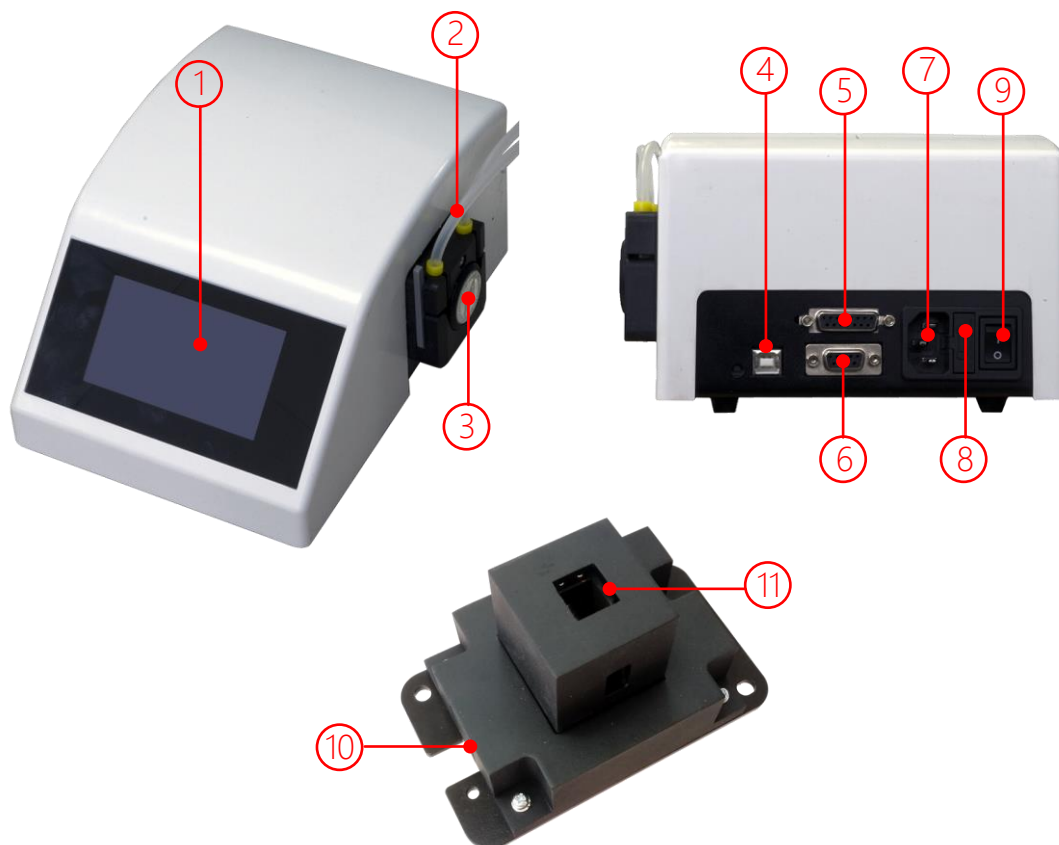
Description	Quantity
Constant Temperature Controller	1PC
10mm Single Cell Holder with Constant Temperature	1PC
Constant Temperature Control Cable	1PC
Power Cords (EU/UK/CH Plug)	1PC
Instruction Manual	1PC

Unpacking

Open the package, according to carefully check the packaging packing list items, if found inside the packaging are missing or damaged items please contact your authorized contractual partners.

Description

The A-1000 series Constant Temperature/Automatic Injection Controller is specially developed to meet the needs of some applications of our UV/Vis spectrophotometer. It is divided into 3 models according to different functions. Model A-1000: Sipper with Temperature Control, model A-1100: Sipper, model A-1200: Temperature Control.



1 – Touch Screen	2 – Injection Pipe
3 – Peristaltic Pump	4 – USB Port
5 – Constant Temperature Control Port	6 – Serial Port
7 – Power Inlet	8 – Fuse Seat
9 – Power Switch	10 – Constant Temperature Control Interface
11 – Thermostatic Single Sample Holder	

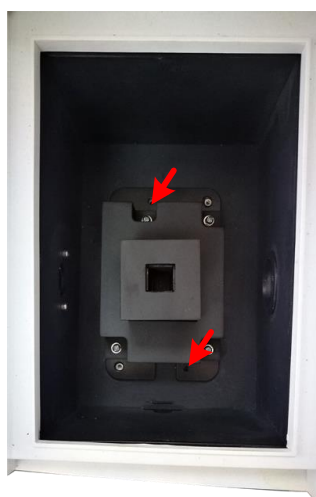
Installation

Placement

Place the instrument on the stable table carefully.

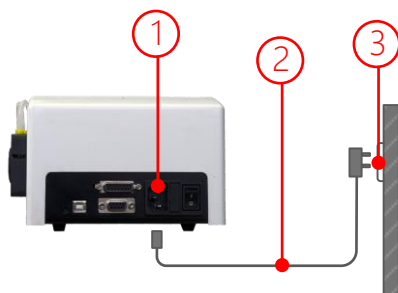
Install thermostatic single sample holder

Turn off the power of the instrument. Remove the original sample holder, and remove the original door insert. As shown in the figure, attach the thermostatic sample holder and tighten the two screws shown by the arrows.



Connect the power cord

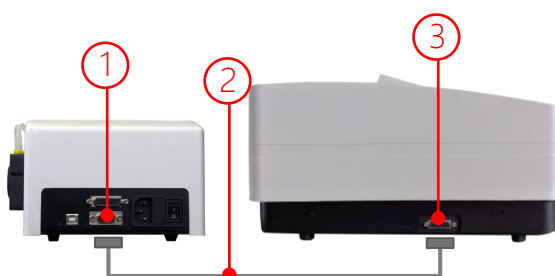
Check to confirm instrument power switch is turned off. Plug the female of the power cord into the power inlet of the instrument and plug the male into the power outlet.



1 – Power inlet	2 – Power cord
3 – Power outlet	

Connect the constant temperature control cable

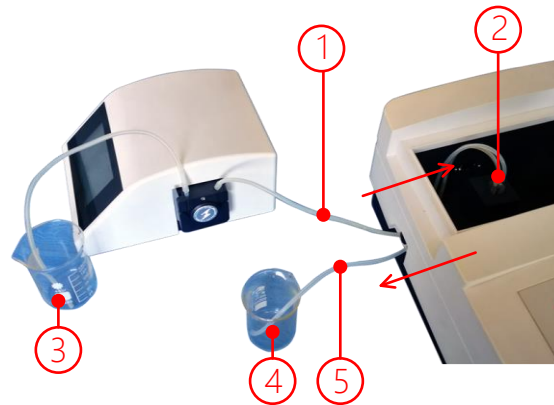
The instrument is turned off. As shown in the figure, insert one end of the constant temperature control cable into the thermostat interface on the outside of the spectrophotometer door insert and the other end into the constant temperature control interface on the back of the controller.



1 – Constant Temperature Control Port	2 – Constant Temperature Control Cable
3 – Constant Temperature Control Interface	

Connect the injection pipe

As shown in the figure, insert the output end of the injection pipe (label 1) through the in hole of the cover and insert the injection end of the flow cuvette (label 2). One end of the sample discharge pipe (label 5) is connected to the sample end of the flow cuvette (label 2), and the other end is passed through the sample hole of the cover plate



1 – Injection Pipe	2 – Flowing Cuvette
3 – Sample Container	4 – Waste Collection Container
5 – Sample Discharge Pipe	

Symbols and conventions

The following chart is an illustrated glossary of the symbols that are used in this manual.

	CAUTION This symbol indicates a potential risk and alerts you to proceed with caution.
	CAUTION This symbol indicates the presence of high voltage and warns the user to proceed with caution.
	CAUTION This symbol indicates risks associated with hot surfaces.

Product Specifications

Model	A-1000	A-1100	A-1200
Function	Sipper with Temperature Control	Sipper	Temperature Control
Temperature Range	10~90°C (0.1°C interval adjustable)	—	10~90°C (0.1°C interval adjustable)
Temperature Control Accuracy	±0.1°C	—	±0.1°C
Temperature Control appointment time	0.5~10h (0.5h interval adjustable)	—	0.5~10h (0.5h interval adjustable)

Injection Speed	1~8ml/min (0.5ml/min interval adjustable)	1~8ml/min (0.5ml/min interval adjustable)	——
Continuous Injection Time	1~300s (1s interval adjustable) or Manual stop	1~300s (1s interval adjustable) or manual stop	——
Sample Recycling Time	1~300s (1s interval adjustable) or Manual stop	1~300s (1s interval adjustable) or manual stop	——
Cleaning Time	1~300s (1s interval adjustable) or Manual stop	1~300s (1s interval adjustable) or manual stop	——
Sample Holder	10mm Single Cell Holder with Constant Temperature	10mm Single Cell Holder	10mm Single Cell Holder with Constant Temperature
Display		4.3 Inch TFT Color Touch Screen	
Communication Interface		Serial port (RS232) ×1, USB-B×1	
Language		10 language switching (English, French, German, Spanish, Portuguese, Italian, Russian, Chinese, Japanese, Korean)	
Power Supply	100~240V AC, 50~60Hz, 60VA	100~240V AC, 50~60Hz, 25VA	100~240V AC, 50~60Hz, 35VA
Size	186mm (W) ×237mm (D) ×121mm (H)	186mm (W) ×237mm (D) ×121mm (H)	167mm (W) ×237mm (D) ×121mm (H)
Weight	2.8kg	2.3kg	2.5kg

Getting Started

The following chart describes the basic operation of the instrument.

Turn the instrument power on

Switch on the power on the back of the instrument to start.

Note: *Do not turn the instrument on and off continuously and quickly. Wait at least 30 seconds before turning the instrument back on, otherwise the electrical and mechanical systems may be damaged.*

Tips for using the touch screen

The entire screen can be activated by touch. To make a selection, use your finger or a capacitive stylus to press or slide the screen. Press or slide the buttons, terms, and icons on the screen to make selections, inputs, and actions.

Note: *Do not press a screen with a sharp object (such as a ballpoint pen tip). Do not place any objects on top of the screen to avoid damaging or scratching the screen.*

Touch screen operation

Press

Click the button on the touch screen, the icon, etc. to achieve the corresponding operation function.

Long press

When modifying the setting parameters, long press the <, > icon on the touch screen to continuously change the setting value.

Slide

When modifying certain setting parameters, press and slide the icon to a position to change the setting value.

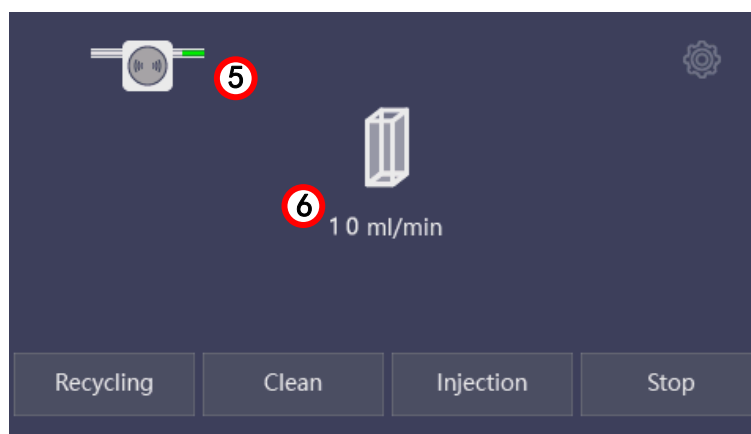
Using the instrument

Main Interface

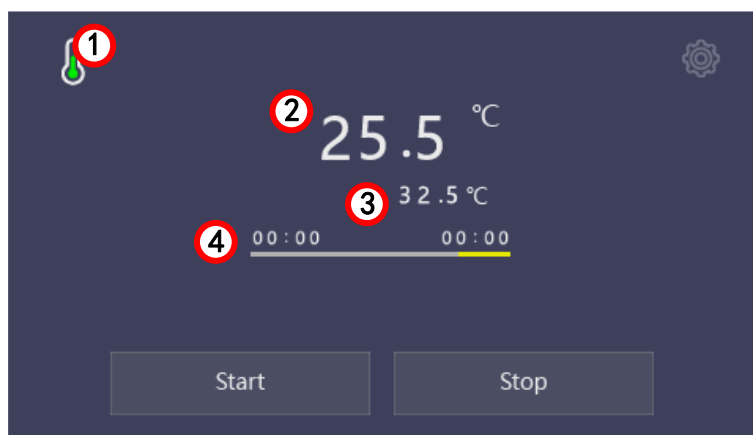
The main interface is divided into two parts, the left part is the temperature control area, and the right part is the injection control area.



A-1000



A-1100



A-1200

①	Constant temperature control state
②	Current temperature
③	Set temperature
④	Appointment time process
⑤	Sipper control state
⑥	Sipper speed
Start	Temperature control start
Stop	Stop temperature control
Recycling	Recycle the sample in the flow cuvette after the end of the measurement
Clean	Cleaning the flow cuvette

	Inhale the sample into the flow cuvette
	Stop sipper/recycling/cleaning
	System parameter setting

Operation

Temperature Control

Start temperature control

Main interface, Press the button **Start** on the left to pop up the temperature control

parameter interface, press the button **<** , **>** to set the temperature control

parameters according to the requirements. Press the button **OK** , the temperature control module start working. Press the button **Cancel** to return to the main interface.

Temperature control

Temperature

<

0. 0

>

Mode

<

Fast

>

Reservation (h)

<

0. 0

>

OK

Cancel

Temperature	Set temperature, range: 10 ° C ~ 90 ° C, 0.1 ° C interval adjustment
Mode	The way to control the temperature, Slow: Rise/Lower temperature slowly, no overshoot (for biometrics) Medium: Rise/Lower temperature in medium speed, small overshoot Fast: Rise/Lower temperature quickly, larger overshoot.
Reservation	Waiting for a period of time to start rising/lowering temperature, range: 0.5~10h, 0.5h interval adjustment or set to "-" no reservation.

Stop temperature control

Main interface, if temperature control is turned on, press the button **Stop** on the left to end the temperature control.

Sipper

Start sipper

1. Place the suction end of the silicone tube in the sample solution;
2. Main interface, press the button **Injection** on the right to pop up the injection control parameter interface, press the button **<** , **>** to set the injection parameters according to the requirements. Press the button **OK** to start the injection and reach the set time (or Press the button **Stop**) to finish; press the button **Cancel** to return to the main interface.

Injection

Time (s)

<

20

>

Speed (ml/min)

<

0.5

>

Place the inhalation end of the pipe into the sample solution!

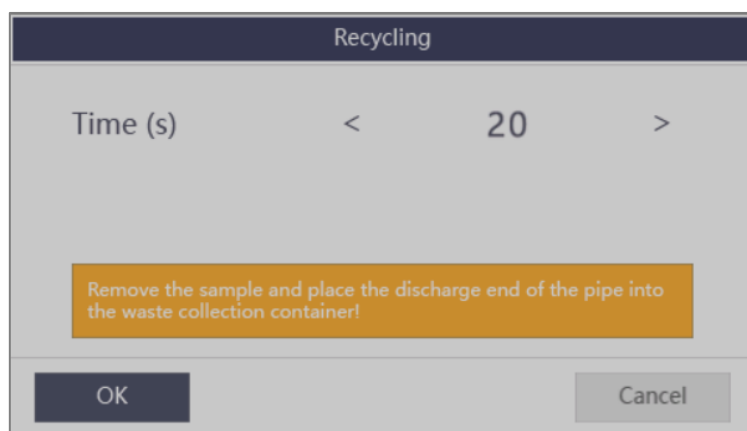
OK

Cancel

Time	Single injection time, range: 1 ~ 300s, interval 1s adjustment or set to "-" continuous injection until manual stop.
Speed	Sample inhalation speed, range: 1 ~ 8ml / min, interval 0.5 ml / min adjustment.

Recycling samples

1. Place the discharge end of the silicone tube in the waste collection container;
2. Main interface, press the button **Recycling** on the right, pop-up recycling control parameter interface, press the button **<** , **>** to set the injection parameters according to the requirements. Press the button **OK** to start recycling, reach the set time (or press the button **Stop**) end. Press the button **Cancel** to return to the main interface.

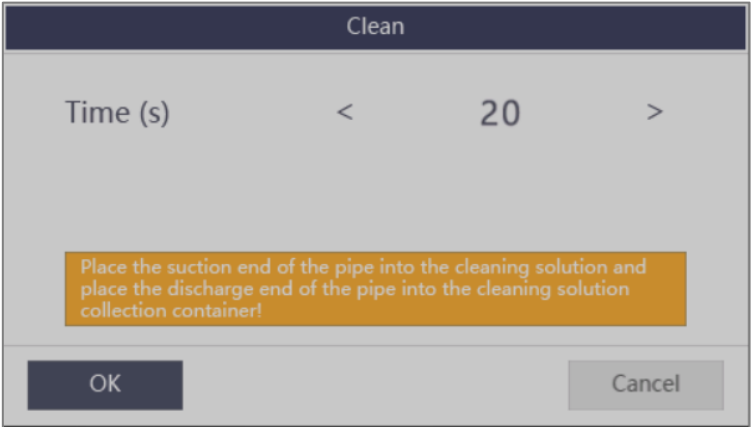


Time	Time for single sample recycle, range: 1 ~ 300s, interval 1s adjustment or set to "-" continuous injection until manual stop.
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Cleaning the flow cuvette

1. Place the suction end of the silicone tube in the cleaning solution;
2. Main interface, press the button **Cleaning** on the right to pop up the cleaning control parameter interface, press the button **<** , **>** to set the injection parameters according to the requirements. Press the button **OK** to start recycling, reach the set

time (or press the button **Stop**) end. Press the button **Cancel** to return to the main interface.



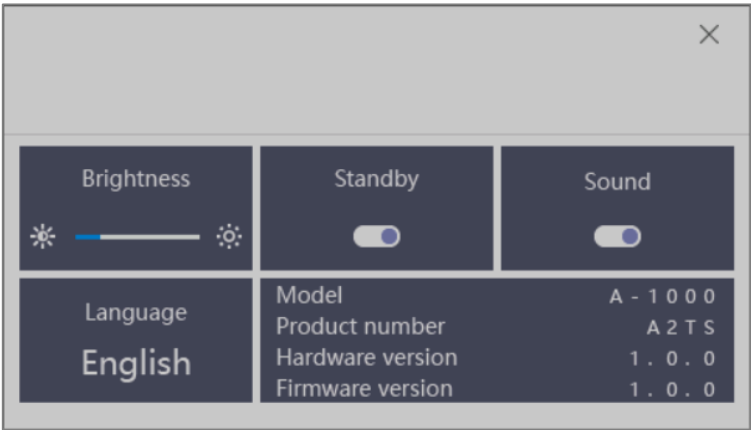
Time	Single cleaning time, range: 1 ~ 300s, interval 1s adjustment or set to "-" continuous injection until manual stop.
------	---

Stop injection/recycling/cleaning

Main interface, if the injection/recycling/cleaning is in progress, press the button **Stop** button on the right to end.

System settings

The main interface, press the icon  to enter the system settings interface,



Set display brightness

Press the icon  ,  on the Brightness tab to decrease/increase the display brightness.

Turn automatic standby on/off

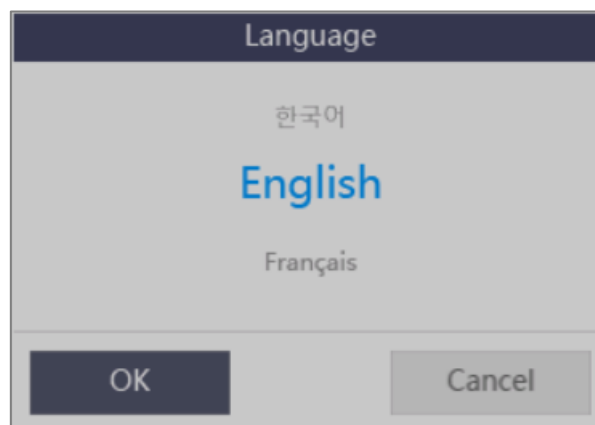
Standby mode means that the instrument automatically reduces the brightness of the display when there is no operation for a period of time to save energy and extend the life of the display. Press the icon  on the standby tab to turn it on/off.

Turn beep on/off when pressing the button on/off

Press the icon  on the sound tab to turn the beep sound on/off.

Language selection

The instrument supports 10 language switching (English, French, German, Spanish, Portuguese, Italian, Russian, Chinese, Japanese, Korean), press on the language parameter on the language label, pop up the language selection window, slide up and down to select Language, press the button **OK** to switch to the target language.



Technical service

Web Resources

Visit the VWR website at www.vwr.com for:

- Complete technical service contact information
- Access to the VWR Online Catalogue, and information about accessories and related products
- Additional product information and special offers

Contact us For information or technical assistance contact your local VWR representative or visit.

www.vwr.com.

Warranty

VWR warrants that this product will be free from defects in material and workmanship for a period of two (2) years from date of delivery. If a defect is present, VWR will, at its option and cost, repair, replace, or refund the purchase price of this product to the customer, provided it is returned during the warranty period. This warranty does not apply if the product has been damaged by accident, abuse, misuse, or misapplication, or from ordinary wear and tear. If the required maintenance and inspection services are not performed according to the manuals and any local regulations, such warranty turns invalid, except to the extent, the defect of the product is not due to such non-performance.

Items being returned must be insured by the customer against possible damage or loss. This warranty shall be limited to the aforementioned remedies. IT IS EXPRESSLY AGREED THAT THIS WARRANTY WILL BE IN LIEU OF ALL WARRANTIES OF FITNESS AND IN LIEU OF THE WARRANTY OF MERCHANTABILITY.

Compliance with local laws and regulations

The customer is responsible for applying for and obtaining the necessary regulatory approvals or other authorisations necessary to run or use the Product in its local environment. VWR will not be held liable for any related omission or for not obtaining the required approval or authorisation, unless any refusal is due to

a defect of the product.

Equipment disposal



This equipment is marked with the crossed out wheeled bin symbol to indicate that this equipment must not be disposed of with unsorted waste.

Instead it's your responsibility to correctly dispose of your equipment at lifecycle -end by handling it over to an authorized facility for separate collection and recycling. It's also your responsibility to decontaminate the equipment in case of biological, chemical and/or radiological contamination, so as to protect from health hazards the persons involved in the disposal and recycling of the equipment.

For more information about where you can drop off your waste of equipment, please contact your local dealer from whom you originally purchased this equipment.

By doing so, you will help to conserve natural and environmental resources and you will ensure that your equipment is recycled in a manner that protects human health.

Thank you

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