CUV11280120161MAN

HeatPumps 4Pools

Certikin

brings water to life

INSTALLATION AND OPERATING MANUAL

Complete instructions for all models of CUV

WARNING:

- Ensure that the unit is **switched off** at the mains before you attempt to conduct any type of maintenance on the CUV.
- Ensure the unit is installed in the recommended orientation, see page 8.
- Ensure that the end cap is tight before running the unit.
- After replacing bulbs or before tightening the end cap, make sure that the O-Rings are in the correct position, and the bulb sockets are dry.
- Should the electrical connections get wet, please dry thoroughly before switching power on.
- **There are no serviceable parts inside the CUV. Do not attempt to tamper or access the parts inside the CUV, as doing so will invalidate the warranty.**

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WARNING: PLEASE READ THE FOLLOWING SAFETY INFORMATION FIRST.

IMPORTANT SAFETY INFORMATION

- Please Read Carefully
- Never look directly at an illuminated UV bulb.
- Do not run this unit dry. Do not cover this unit.
- Please ensure that the unit is full of water before switching it on.
- Always isolate the unit from mains electricity and turn off any water supply before carrying out any maintenance.
- Always disconnect all pool appliances from the mains supply before putting your hands into the water.
- Use in the area only if the installation complies with the relevant wiring regulations.
- Power must be supplied through a Residual Current Device (RCD) with a residual operating current not exceeding 30mA.
- This unit must be earthed when earth wire is fitted.
- Never use a fuse larger than 3 amps on the power lead.
- The unit must not be submerged in water.
- The unit should be mounted in the recommended position for damp / wet environments.
- If the quartz sleeve is cracked, replace it immediately.
- The unit must be either fully frost protected or taken inside during winter months.
- Young children should always be supervised near water.

PRODUCT INFORMATION

- **CUV-15N / CUV-25N Rating:**
  220-240V 50Hz.

- **CUV-30N / CUV-55N / CUV-75N Rating:**
  220-240V 50 / 60Hz.

- All units are Class 1, IPX5. All components are CE compliant.

Disposal Of Your Old Product

Your product is designed and manufactured with high quality material and components, which can be recycled and reused. When this crossed-out wheeled bin symbol is attached to a product, it means the product is covered by the European Directive 2002/96/EC.
Please contact your local authority about correct disposal for electrical and electronic equipment. Our WEE Registration Number is WEE/FE1471RR.

Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.

INTRODUCING THE CERTIKIN CUV

Congratulations on purchasing a Certikin CUV. Our range of CUV clarifiers have been manufactured using the latest technology and design techniques. The CUV will work alongside many different filtration systems designed in combination with a residual sanitiser to disinfect pool water.

Please read this instruction manual carefully from start to finish before attempting to install your CUV.

UNBOXING THE CUV

On opening the box, you can see that the UV bulb and quartz sleeve are packed separately for safe transit. Please refer to pages 6 and 7 of this manual for instructions on how to install the bulb and quartz sleeve. Quartz Sleeve O-Rings and End Cap Sealing Rings are packed in a small bag inside the box.

Please take time to familiarise yourself with your CUV and its components.

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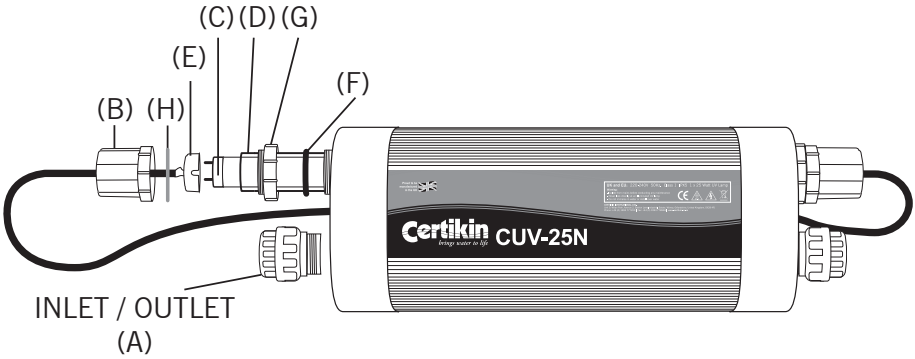
CUV DIAGRAMS AND COMPONENTS LIST

Please familiarise yourself with the components shown in the diagram below:



Description	Diagram Code	CERTIKIN Order Code
Threaded Union Connections	***A***	Imperial connections code: **GP112SUMT**
		Metric connections codes: **GP112SUMT** and **GP214050AUB**
End Cap	***B***	EVOCONNUT
UV Bulb	***C***	Available from your dealer*
Quartz Sleeve	***D***	Available from your dealer*
Bulb Socket	***E***	LAMPHOLDER-T8
Quartz Sleeve O-Ring	***F***	UVCORINGZ
Locking Nut	***G***	EVO-M/F
End Cap Sealing Ring	***H***	UVCOFLATWASHER

IDENTIFYING THE O-RingS

These O-Rings are packed in a small bag inside the box.

QTY X 2: Quartz Sleeve O-Rings ***(G)***

QTY x 2: End Cap Sealing Rings ***(I)***

Quartz Sleeve O-Ring ***(F)***

End Cap Sealing Ring ***(H)***

FLOW RATES

Please note: For optimum performance we recommend that you pass the entire volume of your pool through the CUV unit once every 4 to 8 hours.

We do not recommend the use of pumps with operating pressures in excess of 3 bar.

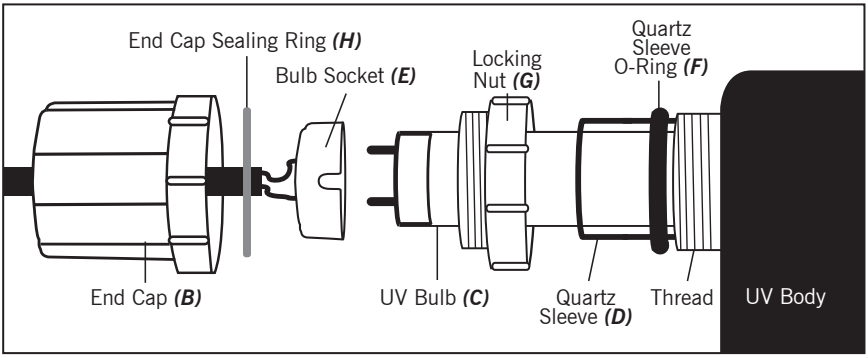
Model	Max. flow rate	Bulb power	Inlet / Outlet
CUV-15N	7,500 Litres/hr	15W (1 x 15W T8)	1½"
CUV-25N	10,000 Litres/hr	25W (1 x 25W T8)	1½"
CUV-30N	15,000 Litres/hr	30W (1 x 30W T8)	1½"
CUV-55N	20,000 Litres/hr	55W (1 X 55W T8)	1½"
CUV-75N	25,000 Litres/hr	75W (1 X 75W T8)	1½"

It is important to note that there are factors that affect how you select the right size of CUV for your pool.

Your CUV will keep your pool clear of green water up to its maximum capacity as stated above along with an appropriate sanitiser.

The CUV range is an effective unit and has multiple uses. It can be used on large pools, aquaculture and other installations, please contact your local dealer for further details.

INSTALLING THE QUARTZ SLEEVE



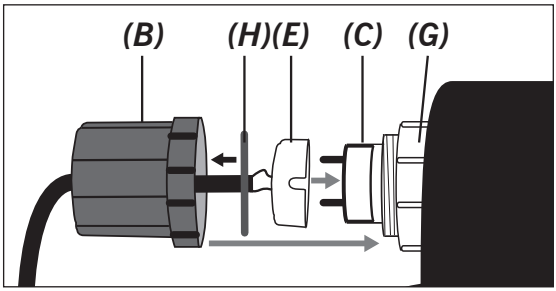
1. Starting at one end of the unit, unscrew the black end cap ***(B)***. You will notice that this black end cap houses the bulb socket ***(E)***.
2. Unscrew the white locking nut ***(G)*** from the same end.
3. Repeat steps 1 and 2 at the other end of the unit.
4. Take the quartz sleeve ***(D)*** from the packaging box and slide it through the CUV until it finds the hole at the far end of the unit.
5. Take the quartz sleeve O-Ring ***(F)*** and fit it around one end of the quartz sleeve.
6. Slide this quartz sleeve O-Ring ***(F)*** towards the thread on the CUV body, ensuring that equal amounts of quartz sleeve are visible at each end of the unit.
7. Fit the quartz sleeve O-Ring ***(F)*** at the other end of the quartz sleeve, again ensuring that equal amounts of quartz sleeve are visible at each end of the unit.
8. Now screw the white locking nut ***(G)*** back into position.

IMPORTANT: ***Ensure that equal amounts of the quartz sleeve are visible at each end of the unit before fitting the locking nuts.***

9. Ensure the locking nut is **hand tightened** to prevent causing damage to the O-Ring. No tools are needed.
10. Repeat steps 8 and 9 at the other end of the unit.
11. The quartz sleeve is now in position ready to take the UV bulb.

INSTALLING THE UV BULB

1. Remove all packaging from the UV bulb ***(C)***.
2. Slide the UV bulb ***(C)*** carefully through the quartz sleeve ***(D)*** that you have just fitted, as per the instructions on page 6.
3. While holding one of the black end caps ***(B)*** gently push the cable through the end cap which will make it easier to fit the bulb socket ***(E)*** in step 5.
   IMPORTANT: ***Do not pull the cable by holding just the bulb socket.***
4. Fit the End Cap Sealing Ring ***(H)*** over the bulb socket and locate it into the end cap so it is seated on the inside lip of the end cap.
   IMPORTANT: ***Ensure the end cap sealing ring is not twisted and it remains in this location throughout the installation.***
5. In no particular order, align the UV bulb pins with the holes in the bulb socket and carefully push the bulb socket firmly onto the UV bulb pins. You may need to hold the other end of the UV bulb to help you fit the socket.



6. Ensure the UV bulb socket is firmly connected to the UV bulb.
7. Repeat steps 3 to 6 at the other end of the unit.
8. Now at one end of the unit, slide the black end cap (checking that the sealing ring in position) over the bulb socket while carefully holding the cable to prevent the bulb connector disconnecting from the UV bulb.
9. Screw this end cap onto the thread on the white locking nut ***(G)*** already connected to the UV body. Hand tighten only.
10. Repeat steps 8 and 9 at the other end of the unit.
11. Check that all of the fittings are hand tightened. No tools are needed.

Illustration shows a finished CUV set-up

POSITIONING AND MOUNTING THE CUV

If you are going to position your CUV outside or in an area where it is likely to get splashed regularly with water, then you must mount the unit the correct way up, as shown in the illustration below.*

Your CUV must not be submerged in water or placed in a position where water may collect around the unit. The electrics within the CUV units are sealed in a water tight unit. The CUV has an IP rating of X5.

Fix your CUV into position using the stainless steel brackets attached to the CUV. Screws and washers are not provided.

Please ensure that there is enough space at one end of the CUV to enable bulb / quartz sleeve removal and maintenance.

The CUV should be installed on the return line to the pool after pump/s, filter/s, water treatment and heating.

The CUV is safe to use with ozone units. But if so, special o-rings are required or the o-rings will need to be replaced each year.

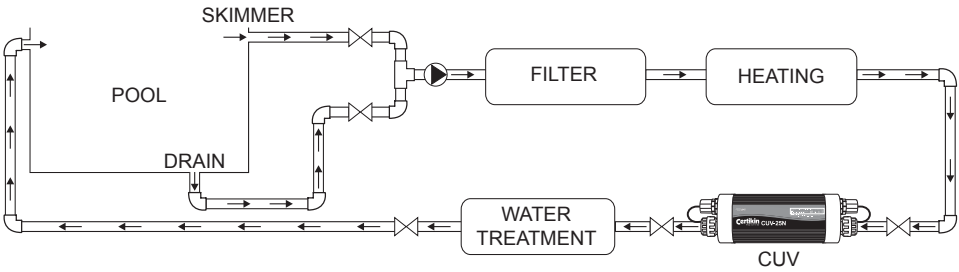
The Certikin CUV can operate between water / ambient temperatures of 0°C - 40°C. The unit should not be positioned in direct sunlight where ambient temperatures could exceed 50°C.

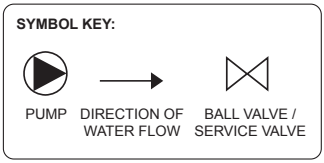
IMPORTANT: Valves positioned after the CUV must never be closed when the pump is in operation. **DO NOT** "dead-head" the unit.

Your CUV is designed to take 1½" threaded fittings.

*If your CUV will be positioned in a permanently dry environment then it can be installed in any position.

POSITIONING AND MOUNTING THE CUV





IMPORTANT: Valves positioned after the CUV must never be closed when the pump is in operation. **DO NOT** "dead-head" the unit.

CONNECTION TO YOUR PIPEWORK

IMPORTANT: *Do not overtighten fittings.*

The two socket unions supplied should be screwed into the inlet / outlet at either end of the unit. Both metric and imperial union ends are provided and the appropriate fittings should be used for your installation. Please note that there is no correct direction of flow through the unit, either end of the unit may be used as the inlet or outlet. PTFE tape may be required.

IMPORTANT: Valves positioned after the CUV must never be closed when the pump is in operation. **DO NOT** "dead-head" the unit.

CONNECTION TO THE ELECTRICITY SUPPLY

Electrical installations must be done by a qualified electrician.

The power supply must meet the specifications on the product. The cores in the supply cable are coloured in accordance with the following code:

Brown = Live *(Yellow or Red*)*
Blue = Neutral
Green / Yellow = Earth *(Solid Green*)*

Do not use the supply cable to lift the CUV as this may cause damage.

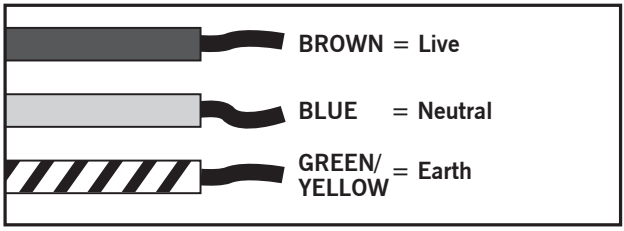
WARNING - A Residual Current Device (RCD), also known as the Residual Current Circuit Breaker (RCCB), with a tripping current not exceeding 30mA must be installed in the supply circuit. A means of disconnection from the supply having a contact separation of at least 3mm in all poles must be incorporated in the wiring.

Caution: Use in the area of a swimming pool only if the installation complies with the relevant wiring regulations. Please consult a qualified electrician.

All electrical installations and wiring must be adequately protected to prevent any damage.

Enough electrical cable is supplied with the unit to connect to the mains electric. This unit must be connected to permanent wiring. A switch with 3mm contact separation must be provided in the fixed wiring to provide disconnection from the electricity supply.

It is recommended that the CUV unit is wired in conjunction with the pump so that when the pump is turned off, so is the CUV unit.



UV BULB REPLACEMENT

ALWAYS ISOLATE THE UNIT FROM ANY ELECTRICITY AND WATER SUPPLIES BEFORE CARRYING OUT MAINTENANCE ON THE UNIT.

TO REMOVE A UV BULB:

It is not necessary to stop the water circulating through the CUV to change the bulb.

1. Disconnect the electricity supply.
2. Unscrew the black end cap at one end of the unit. Take care not to unscrew the white locking nut also.
3. Carefully slide the black end cap over the wire to reveal the bulb socket. Take care not to lose the end cap sealing ring.
4. Disconnect the bulb socket.
5. Repeat steps 2 to 4 at the other end of the CUV.
6. With the end caps out of the way, carefully slide out the UV bulb.

WARNING: If the end caps / electrical connections get wet during this procedure, please ensure that they are thoroughly dried before re-connecting.

TO INSTALL A NEW UV BULB:

Follow the instructions on **page 7** to fit a new UV bulb.

IMPORTANT: After checking all the fittings are correctly tightened you can switch your unit back on.

As already mentioned, it is essential that the unit is protected from frost during the winter months, or disconnected from water and electricity supplies and stored indoors. During the spring and summer season, the quartz sleeve, which separates the UV bulb from the water passing through the unit, will need to be cleaned two or three times. This is essential, as dirt or limescale building up on the quartz sleeve will inhibit the penetration of the ultraviolet light into the water and affect the efficient working of the unit.

REPLACING / CLEANING QUARTZ SLEEVE

ALWAYS ISOLATE THE UNIT FROM ANY ELECTRICITY AND WATER SUPPLIES BEFORE CARRYING OUT MAINTENANCE ON THE UNIT.

TO REMOVE A QUARTZ SLEEVE:

PLEASE NOTE: Removing the quartz sleeve will cause water to flow out of the unit.

1. Remove the UV bulb as described on page 12.
2. With the electricity supply disconnected, CUV isolated and UV Bulb removed, unscrew the locking nut at one end of the CUV.
3. Carefully remove the quartz sleeve O-Ring and keep safe.
4. Unscrew the locking nut from the other end and remove the quartz sleeve O-Ring and keep safe.
5. Carefully remove the quartz sleeve taking care not to allow it to drop inside the UV body.
6. To drain any water that may be left in the unit, we would recommend that you unscrew the mounting bracket(s), disconnect the unit from the pipework, and tilt the unit to drain the chamber of water.
7. Clean the sleeve and polish with a soft cloth or paper towel. *If you live in a hard water area, you may get limescale on the quartz sleeve; this can be easily removed by using vinegar or a cold water descaler.*

WARNING: If the end caps / electrical connections get wet during this procedure, please ensure that they are thoroughly dried before re-connecting.

TO RE-INSTALL A QUARTZ SLEEVE:

Follow the instructions on **pages 6 and 7** to re-install the quartz sleeve and UV bulb.

IMPORTANT: After checking all the fittings are correctly tightened you can switch your unit back on.

TROUBLESHOOTING

During this procedure or if you notice water leaking from around the end caps you should check the following:

1. Check the O-Ring is undamaged.
2. Check there are no cracks and breaks in the quartz sleeve.
3. Check that the locking nut is compressing the O-Ring to form a water tight seal.
4. Check that the end caps are sufficiently tight.
5. All components are clean and free from dirt and debris.

Please note that the items list 1-5 are service items and therefore not subject to a claim under warranty. The service items listed are available from your Certikin dealer.

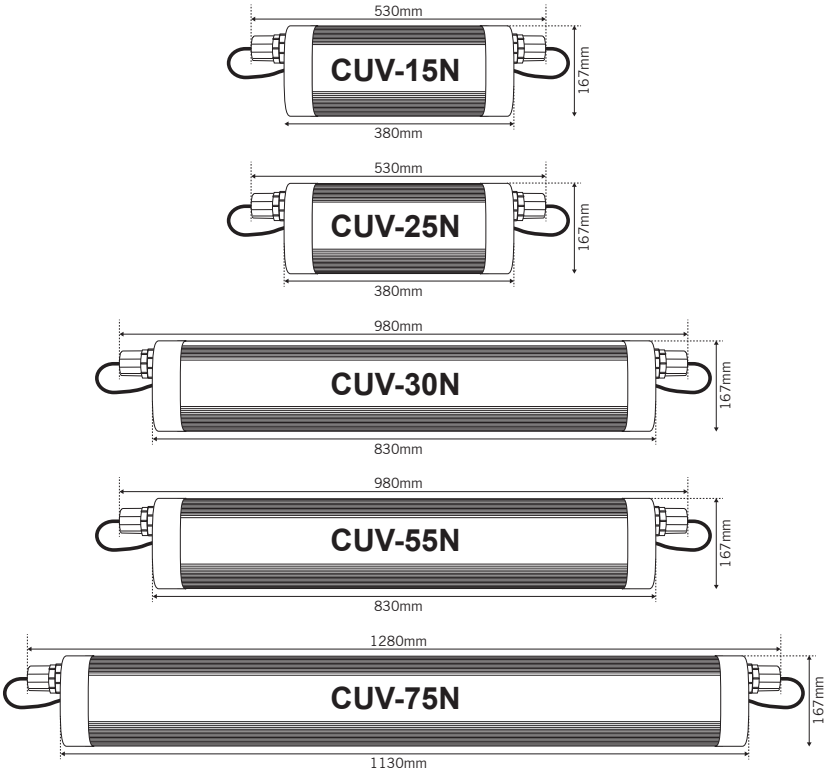
IN BUILT PROTECTION

The CUV range of pool clarifiers have thermal overload protection which automatically shuts down and then enables a fast re-start when the problem has been cleared. This may be as a result of water in the end caps. Please see the troubleshooting section.

Thermal Overload Protection -
This will automatically switch off the unit should the temperature exceed the maximum operating temperature limits.

Automatic start up and shut down protection -
This protects the electrical components in the event of a power surge.

DIMENSIONS



ALL UNITS ARE 88mm DEEP

CUV BODY ONLY (NO FITTINGS)

CUV-15N = 380mm (l) x 167mm (h) x 88mm (w)
CUV-25N = 380mm (l) x 167mm (h) x 88mm (w)
CUV-30N = 830mm (l) x 167mm (h) x 88mm (w)
CUV-55N = 830mm (l) x 167mm (h) x 88mm (w)
CUV-75N = 1130mm (l) x 167mm (h) x 88mm (w)

(ADD 200mm to the length to accommodate the length of the supplied fittings)

END CAP TO END CAP

CUV-15N = 530mm (l) x 167mm (h) x 88mm (w)
CUV-25N = 530mm (l) x 167mm (h) x 88mm (w)
CUV-30N = 980mm (l) x 167mm (h) x 88mm (w)
CUV-55N = 980mm (l) x 167mm (h) x 88mm (w)
CUV-75N = 1280mm (l) x 167mm (h) x 88mm (w)

TROUBLE SHOOTING

If the UV bulb is not lit, then you need to investigate the power to your unit.

- Has your RCD tripped? If yes, check your wiring and reset.
- Examine the UV bulb for signs of failure, and replace if necessary.
- Is the UV bulb fitted correctly? Unscrew the end caps and ensure correct fitting as per the instructions as described in this manual.
- Are the end caps dry? If not, allow to dry thoroughly. We recommend the use of a hair-dryer for this.

The unit worked well when I first installed it but recently my pool has gradually gone green again – what is wrong?

Quartz sleeve may have become dirty and requires cleaning. Also make sure you have the right model for your pool size. Ensure your pool filtration is removing waste and debris efficiently. Dirt in pools will affect the efficiency of the CUV. Check that your pool water volume is pumping through the CUV every 4 to 8 hours.

Only after you have carried out these checks should you contact your Certikin dealer, who will then be able to advise you further.

The unit appears to be leaking from the end fittings?

This could possibly be caused by an incorrectly fitted, damaged or overtightened O-Ring on the quartz sleeve. Please check the quartz sleeve O-Ring, reposition it or if necessary replace it with a new one.

FREQUENTLY ASKED QUESTIONS

How often should I change the UV bulb?
The CUV bulb has an effective lifespan of 9000 hours, but it is an accepted practice to replace a UV bulb once a year, at the start of every pool season.

Is the CUV suitable for salt water use?
The CUV is manufactured from materials that will not corrode in salt water and it is safe to use your CUV with salt chlorinators.

How long can I leave the unit running?
The Certikin CUV has been designed and manufactured to the highest standards, and could be run 24 hours a day, every day. If the unit is frost protected it may be left running throughout the winter. Otherwise, the unit should be removed, drained and stored safely for the winter.

Can I bury the unit underground?
No. The CUV, although weatherproof, is not suitable for installing in any situation that may be subject to immersion in water.

Can it be used with ozone?
Yes. The CUV is safe to use with ozone units. But if so, special o-rings are required or the o-rings will need to be replaced each year.

When replacing the bulb I cannot locate it into the bulb socket at the opposite end of the CUV?
Please follow the procedure for cleaning / replacing the quartz sleeve. This will explain the correct procedure for removing both end caps and sockets and explain the method for easy installation.

What are the minimum and maximum operating temperatures?
The Certikin CUV can operate between water / ambient temperatures of 0°C - 40°C. The unit should not be positioned in direct sunlight where ambient temperatures could exceed 50°C.

OUR GUARANTEE

This product is guaranteed against defects in material and workmanship for 2 years from the date of purchase, under normal usage. The guarantee DOES NOT APPLY in case of improper use, negligence, lack of maintenance or accidental damage to the CUV. If the CUV fails due to a manufacturing fault within this period it will be either repaired or replaced free of charge. Liability is limited to replacement of the faulty product only; no other costs will be reimbursed. This guarantee is not transferable and does not affect your statutory rights. This guarantee does not confer any rights other than those expressly set out above. This guarantee does not cover the CUV bulb or quartz sleeve.

There are no serviceable parts inside the CUV. Do not attempt to tamper or access the parts inside the CUV, as doing so will invalidate the warranty.

The manufacturer or supplier shall not be responsible, or held liable for any damages caused by defective components or materials of this product; or for loss incurred by interruption of service; or any consequential/incidental damages and expenses arising from the production, sale use or misuse of this product.

Any warranty claim must be accompanied by a valid, dated proof of purchase.

The installation and use of your product outside of our recommendations as printed in this manual may also void the warranty.

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