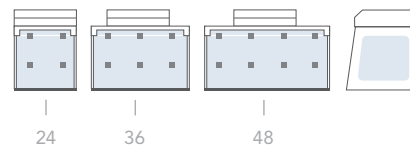


## UV Dead Air Boxes

Circulation-free enclosures designed to maintain a pristine workspace and safeguard sensitive PCR amplification reactions from contamination.



PCR-48 (DB)



## CONTENTS:

- Product Overview (p.2)
- Design Features (p.3)
- Performance & Selection (p.4)
- Specifications (p.5)
- Options & Accessories (p.7)

PurairUV

Dead Air Boxes

24 • 36 • 48

PRODUCT OVERVIEW

2

## INTRODUCTION

The Purair® UV Dead Air Box is a specialized laboratory enclosure designed to create a stable, circulation-free workspace that safeguards sensitive biological samples, particularly during PCR amplification. It uses an internal UV light to sterilize the worksurface, along with any tools placed on the worksurface, between applications. Built-in safety interlocks protect users from UV exposure. By eliminating forced airflow, Purair UV Dead Air Boxes help reduce cross-contamination. This helps support the accuracy and reliability of DNA/RNA manipulation as well as other routine molecular biology procedures.

## APPLICATIONS

Purair UV enclosures are intended for use in non-hazardous applications where biological or biohazard byproducts are not generated and user protection is not required.

PCR Laboratories \ DNA/RNA Manipulation  
Forensics \ Pharmaceutical \ Sample Preparation  
General Research Protocols



## KEY FEATURES

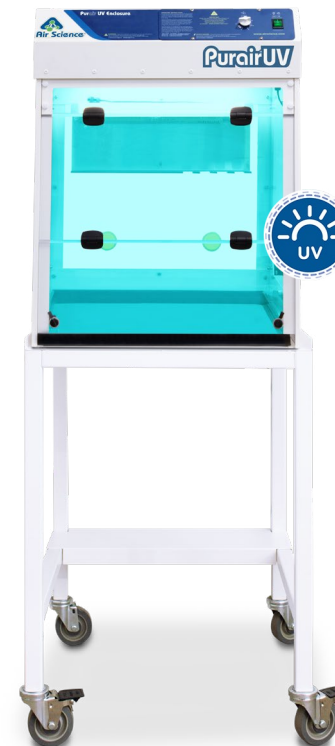
- **Still-Air Environment:** Unlike laminar flow cabinets which provide non-turbulent, HEPA-filtered airflow, a dead air box creates a circulation-free space with no airflow (still air).
- **UV Sterilization:** A built-in 254nm UV light is used to irradiate and sterilize the interior of the box, between uses, reducing microorganisms and nucleic acid contamination that could affect sensitive reactions.
- **Safety Interlock:** A safety switch is included to disable the UV light automatically when the protective sash is raised, preventing accidental operator exposure.
- **Contamination Prevention:** A fully closing front sash helps reduce introduction of airborne particulate contamination into the work zone, helping to maintain the integrity of experimental results.
- **Cost-Effectiveness:** Dead air boxes are a more cost-effective option for many basic and routine laboratory tasks compared to more complex air filtration systems.

## UV PROTECTION

Because Polymerase Chain Reaction (PCR)\* amplification is extremely sensitive to contamination, prevention of contamination requires good laboratory practices to minimize external or cross-contamination during reagent preparation, sample preparation and sample amplification.

The Purair UV is designed to create light emission conditions known to safely decontaminate contents while protecting the operator. High-intensity UV lamps destroy exposed surface DNA and bacteria. This helps minimize cross-contamination in sensitive PCR experiments and improves the reliability of results.

\* Polymerase chain reaction (PCR) is a patented process owned by Hoffman La Roche.



PCR-24 (DB) shown with optional mobile cart.



Deep into its second generation, Air Science embraces the diversity and cultural heritage of the founders and co-workers who are continuing a tradition of excellence. Demonstrating a commitment to adaptation, inclusion and quality output from a United States-based company with a domestic and global reach.

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## CONTENTS:

- Product Overview (p.2)
- Design Features (p.3)
- Performance & Selection (p.4)
- Specifications (p.5)
- Options & Accessories (p.7)

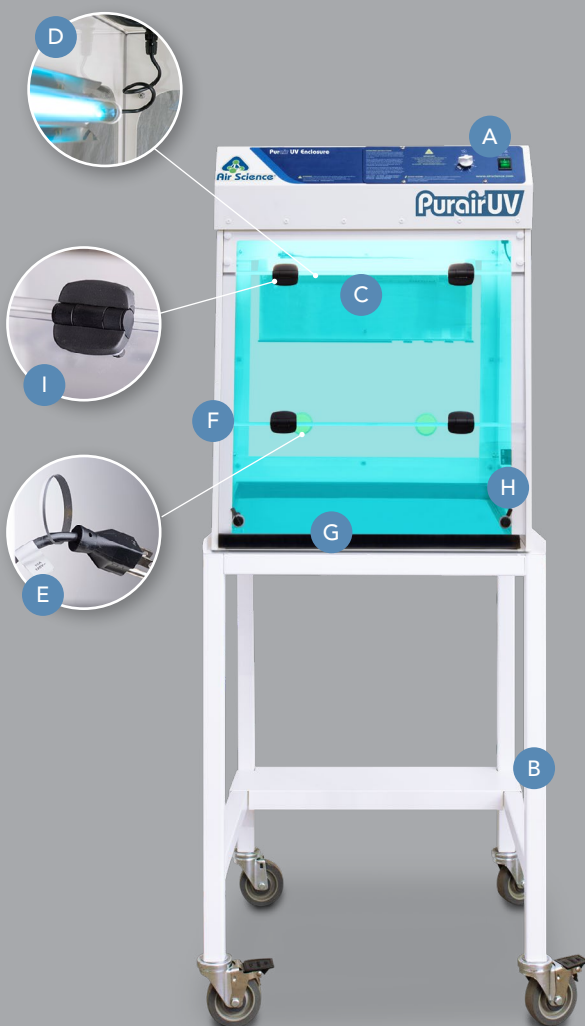
# PurairUV

Dead Air Boxes

24 • 36 • 48

DESIGN FEATURES

# 3



## DESIGN FEATURES

- A. Control Panel:** The integrated control panel features an On/Off switch for the light and UV lamp timer.
- B. Stand:** Optional base stand converts to mobile cart with optional locking casters.
- C. Lighting:** Compact LED cabinet lamp provides ample illumination of the work zone.
- D. UV Lamp:** Built-in ultraviolet lamp with timer enables surface decontamination between UV cycles. Includes a double-flap safety cover of 0.2" (5 mm) UV absorbing 254 nm beta radiation resistant polycarbonate; provides superior operator protection while allowing easy access to the work zone. Timer can be set over range of 0 to 60 minutes or set to HOLD.
- E. Pass Through Ports:** Convenient rear wall pass-through ports for safe routing of instrument cords, cables and leads.
- F. Ergonomic Design:** Ergonomically angled front improves reach and user comfort.
- G. Work Surface:** Large polypropylene work surface, white or black standard with optional stainless steel work surface available.
- H. Magnetic Door Latch:** Safety interlock prevents operator exposure to UVs when door is opened during decontamination cycle.
- I. Double-Hinged Self-Locking Front Sash:** The magnetic sash closure protects the work surface during use and fully closes when the cabinet is not in operation.

## ADDITIONAL FEATURES

**360 Degree Visibility:** Clear back and side panels allow ambient light into the chamber and provide users with an unobstructed view of contents.

**Construction:** All models are available in 120V, 60Hz or 230V, 50Hz models.

PCR-24 (DB), shown with optional mobile cart.

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## CONTENTS:

- Product Overview (p.2)
- Design Features (p.3)
- Performance & Selection (p.4)
- Specifications (p.5)
- Options & Accessories (p.7)

# PurairUV

Dead Air Boxes

24 • 36 • 48

PERFORMANCE & SELECTION

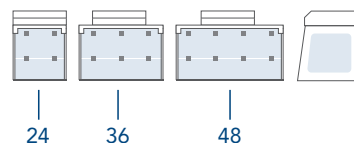
# 4

Each Purair UV enclosure is expertly designed to meet specific applications and certified for quality construction. Standard features, options and accessories are developed purposefully to enhance user-friendliness.

## DESIGN

The cabinet frame and work surfaces, comprised of industrial components, are durable and chemically resistant.

An optional stainless steel work surface includes lips on all four sides to contain spills.



## SELECTION

Purair UV enclosures are available in three model sizes with various options. Designed for desktop use or installation on an optional base stand or mobile cart.

## CONTROL

The **standard integrated control panel** features an On/Off switch for the light and UV lamp timer.



PCR-36 (DB)

### OPERATING INSTRUCTIONS:

For decontamination between amplifications, use the UV lamps. UV lamps can only be turned on when front cover is closed. To activate UV, turn knob to desired time setting.

Para la descontaminación entre amplificaciones, use las lámparas UV. Las lámparas UV solo pueden encenderse cuando la cubierta frontal está cerrada. Para activar la luz ultravioleta, active la configuración de tiempo deseada.

Pour la décontamination entre les amplifications, utilisez les lampes UV. Les lampes UV ne peuvent être allumées que lorsque le capot avant est fermé. Pour activer les UV, tournez le bouton sur le réglage de l'heure désirée.

對於擴增分析間的除污，請使用UV燈。UV燈只能在前面板關閉時才能使用。要打開UV燈，請轉到所需的設定時間。



#### IMPORTANT: RISK GROUP 3

Protect skin /eyes from exposure when UV lamp is on.

Groupe de risque 3. Protéger la peau et les yeux de l'exposition lorsque la lampe UV est allumée.

Débranchez l'alimentation avant de réparer ou de retirer le panneau.

當uv燈亮起時，需保護皮膚及眼睛不暴露於UV燈下。



UV TIMER



LIGHT



**SHOCK HAZARD:** Disconnect power before servicing or removing panel.  
Desconnecte la energía antes de reparar o quitar el panel.  
Débranchez l'alimentation avant de réparer ou de retirer le panneau.  
維修或拆卸面板之前斷開電源。

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Standard Controller

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## CONTENTS:

Product Overview (p.2)

Design Features (p.3)

Performance & Selection (p.4)

Specifications (p.5)

Options & Accessories (p.7)

# PurairUV

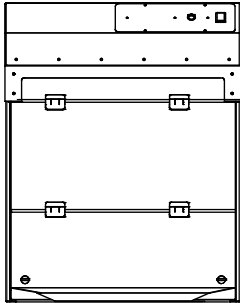
Dead Air Boxes

24 • 36 • 48

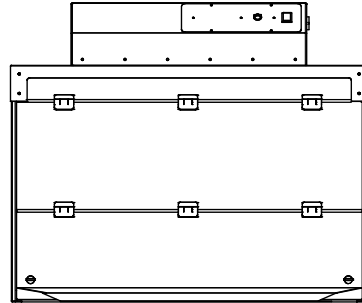
SPECIFICATIONS

# 5

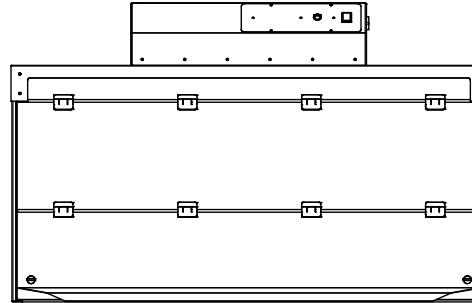
PCR-24 (DB)



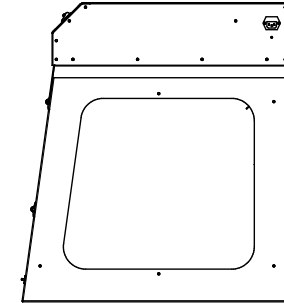
PCR-36 (DB)



PCR-48 (DB)



Side View



MODEL	VOLTAGE	DIMENSIONS					WEIGHT (LBS/KG)	
		Nominal Width	Internal Height	Internal Depth	External (W × D × H)	Shipping (W × D × H)	Net	Ship
PCR-24 (DB)-A	120V, 60Hz	24" / 610 mm	23.29" / 591.5 mm	26.75" / 679 mm	24" × 27" × 30" / 610 × 686 × 762 mm	48" × 40" × 45" / 1219 × 1016 × 1143 mm	72 / 33	150 / 68
PCR-24 (DB)-G	230V, 50Hz	24" / 610 mm	23.29" / 591.5 mm	26.75" / 679 mm	24" × 27" × 30" / 610 × 686 × 762 mm	48" × 40" × 45" / 1219 × 1016 × 1143 mm	72 / 33	150 / 68
PCR-36 (DB)-A	120V, 60Hz	36" / 914 mm	23.29" / 591.5 mm	26.75" / 679 mm	36" × 27" × 30" / 914 × 686 × 762 mm	48" × 40" × 45" / 1219 × 1016 × 1143 mm	99 / 45	175 / 79
PCR-36 (DB)-G	230V, 50Hz	36" / 914 mm	23.29" / 591.5 mm	26.75" / 679 mm	36" × 27" × 30" / 914 × 686 × 762 mm	48" × 40" × 45" / 1219 × 1016 × 1143 mm	99 / 45	175 / 79
PCR-48 (DB)-A	120V, 60Hz	48" / 1219 mm	23.29" / 591.5 mm	26.75" / 679 mm	48" × 27" × 30" / 1219 × 686 × 762 mm	60" × 40" × 45" / 1524 × 1016 × 1143 mm	138 / 63	225 / 102
PCR-48 (DB)-G	230V, 50Hz	48" / 1219 mm	23.29" / 591.5 mm	26.75" / 679 mm	48" × 27" × 30" / 1219 × 686 × 762 mm	60" × 40" × 45" / 1524 × 1016 × 1143 mm	138 / 63	225 / 102

"A" — 120V, 60Hz

"G" — 230V, 50Hz

CONTENTS:

- Product Overview (p.2)
- Design Features (p.3)
- Performance & Selection (p.4)
- Specifications (p.5)
- Options & Accessories (p.7)

PRODUCT SPECIFICATIONS

Construction	PCR-24 (DB)	PCR-36 (DB)	PCR-48 (DB)
Finish (exterior)	<... White epoxy-coated steel frame with white legs on cabinet sides. ...>		
Windows	<... Polycarbonate, transparent, UV absorbing. ...>		
Controls	<... Main On/Off switch for lighting. UV timer, safety interlock shut-off. ...>		
Work Surface	<... Standard, black polypropylene. Optional, white polypropylene or stainless steel. Specify when ordering. ...>		
Pass Through Ports	<... Two standard, knockout. ...>		
Shelving	<... Decontamination shelf on rear wall. ...>		
Front Sash	<... Standard, hinged double with safety interlock. ...>		
Efficiency	PCR-24 (DB)	PCR-36 (DB)	PCR-48 (DB)
Lighting	<... LED lighting ...>		
UV Lamp	<... 1 × 253.7 nanometer 15 watt. ...>		

CONTENTS:

- Product Overview (p.2)
- Design Features (p.3)
- Performance & Selection (p.4)
- Specifications (p.5)
- Options & Accessories (p.7)

OPTIONS AND ACCESSORIES


Purair Model		PCR-24 (DB)	PCR-36 (DB)	PCR-48 (DB)
Spill Tray (Stainless Steel)	Removable for easy cleaning.	TRAY-P5-24-SS	TRAY-P5-36-SS	TRAY-P5-48-SS
Base Stand, Mobile, with Casters	Provides a lower storage shelf; accommodates wheelchair access. Locking casters fix the hood in place.	CART-25	CART-36	CART-50
Base Cabinet, Fixed (Metal)	Provides storage space below.	CART-MCC-25	CART-MCC-36	CART-MCC-50
Base Cabinet, Fixed (Polypropylene)	Provides storage space below.	CART-SSC-25	CART-SSC-36	CART-SSC-50
Fire Safety Cabinet Base	Flame resistant safe storage for combustible and flammable liquids.	CART-FSC-25	CART-FSC-36	CART-FSC-50

CONTENTS:

- Product Overview (p.2)
- Design Features (p.3)
- Performance & Selection (p.4)
- Containment & Filtration (p.5)
- Specifications (p.6)
- Options & Accessories (p.8)

WARRANTY

This product is protected by the Air Science Legacy Limited Lifetime Warranty™.



For details visit the [Warranty section](#) of our website.

STANDARDS & COMPLIANCE

Quality Management Systems	ISO 9001:2015
Electrical Safety	UL-C-61010-1 CAN/CSA C22.2 61010-1-12 EN 61010-1:2010 CE Mark
Environment	ISO 14001:2015 ENERGY STAR® Partner



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