78900-00
78900-01
78900-02
78900-03
78900-04
78900-05

Cole-Parmer® Basic Series Ductless Fume Hoods

CE TÜV SÜD GS

Table of Contents

Safety Warnings

- Read all instructions before proceeding and observe the installation procedure and environmental/electrical requirements.

- Anyone working with, on or around this equipment should read this manual. Failure to read, understand and follow the instructions given in this documentation may result in damage to ~~to~~ the unit, injury to operating personnel and/or poor equipment performance.

- Any internal adjustment, modification or maintenance to this equipment must be undertaken by qualified service personnel.

- The use of any hazardous material in the cabinet must be monitored by an industrial hygienist, safety officer or some other suitably qualified individual.

- Explosive or inflammable substances should never be used in the cabinet unless a qualified safety professional has evaluated the risk involved.

- If chemical, radiological or other non-microbiological hazards are being used in the cabinet, additional protective measures should be taken. Additionally, the operation should be monitored by a suitably trained individual.

- If the equipment is used in a manner not specified by this manual, the protection provided by this equipment may be impaired.

Symbols

⚠️	Warning of hazardous area or situation
⚡	Warning of dangerous electric voltage

Limitation of Liability

The disposal and/or emission of substances used in connection with this cabinet may be governed by various local regulations. Familiarization and compliance with any such regulations are the sole responsibility of the users of the cabinet. Cole-Parmer's liability is limited with respect to user compliance with such regulations.
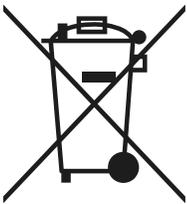
At the end of your product and accessories life, it must not be discarded as domestic waste. Ref: EU Directive 2012/19/EU on Waste Electrical and Electronic Equipment Directive (WEEE). Please contact your distributor / supplier for further information. For end users outside of the EU consult applicable regulations.

Warranty

The manufacturer agrees to correct for the original user of the product, either by repair (using new or refurbished parts), or at the manufacturer's election, by replacement (with a new or refurbished product), any defects in material or workmanship which develop during the warranty period. The standard warranty is twelve (12) months after delivery of the product for Non-Consumable and Electrical parts, excluding Filters and other Consumables. In the event of replacement, the replacement unit will be warranted for the remainder of the original warranty period or ninety (90) days, whichever is longer. For purposes of this limited warranty, "refurbished" means a product or part that has been returned to its original specifications. In the event of a defect, these are your exclusive remedies.

If the product should require service, contact the manufacturer's/supplier's office for instructions. When return of the product is necessary, a return authorization number is assigned and the product should be shipped, transportation charges pre-paid, in either its original packaging or packaging affording an equal degree of protection to the indicated service center. To ensure
prompt handling, the return authorization number must be placed on the outside of the package. A detailed explanation of the defect should be enclosed with the item. The warranty shall not apply if the defect or malfunction was caused by accident, neglect, unreasonable use, improper service, acts of God, modification by any party other than Cole-Parmer, or other causes not arising out of defects in material or workmanship.

EXCLUSION OF IMPLIED WARRANTIES. THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WHICH EXTEND BEYOND THE DESCRIPTION AND PERIOD AS STATED IN THE OPERATOR'S MANUAL INCLUDED WITH EACH PRODUCT. LIMITATION ON DAMAGES. THE MANUFACTURER'S SOLE OBLIGATION UNDER THE WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF A DEFECTIVE PRODUCT AND THE MANUFACTURER SHALL NOT, IN ANY EVENT, BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND RESULTING FROM USE OR POSSESSION OF THIS PRODUCT.

Some states do not allow: (A) limitations on how long an implied warranty lasts; or (B) the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may have other rights that vary from state to state.

Ⅰ. Product Information

The Cole-Parmer® Basic Series ductless fume hoods are a series of high efficiency products designed to protect the user and the environment from hazardous vapors generated on the work surface. At the heart of the Cole-Parmer fume hood product line is the innovative Filtration Technology that creates a safe work environment over the widest range of applications in the industry.

Visit our website for Cole-Parmer Basic Series ductless fume hood specifications.

Ⅱ. Unpacking Your Cabinet

This chapter aims to provide relevant information on how to handle the cabinet properly upon receipt. Failure to follow these instructions may damage the cabinet. We strongly advise you to read this chapter carefully before proceeding further.

2.1 Step-By-Step Procedure

1. Inspecting the Crate, Pallet, Boxes.

   » Upon receipt of your new cabinet, inspect all cartons. If there is any visible damage to the exterior please refer to Damaged Freight Claim Information on our website.

2. Moving the Pallet.

   » The pallet is designed to protect our cabinet from any foreseeable circumstances. However, excessive impact onto the boxes or pallet may also damage the cabinet. Prevent any direct impact or hitting to the pallet when moving.

   » When lifting the pallet, always ensure that the floor jack or mechanical lift truck has fully entered under the pallet in order to achieve stability. Failure to do so will increase the risk of the pallet falling off the floor jack or mechanical lift truck during handling. Please use a suitable extension bar when necessary.

3. Opening the Boxes.

   » If you did not receive one or more of the parts listed on the packing checklist, or if any of the items are damaged, please refer to the Damaged Freight Claim Information on our website.

4. Removing the Packaging Material.

   » The cabinet is protected by extruded polystyrene foam, cardboard and/or shrink-wrap.

   » If you find any damage during this stage of unpacking please refer to the <u>Damaged Freight Claim</u> <u>Information</u> on our website.

   » We recommend leaving the cabinet secured with straps to the pallet until the cabinet is located in its approximate final position to facilitate ease and safety in handling.

   Note: Choosing the best location for your cabinet in order to achieve optimum operating performance is determined by a number of factors. Please refer to the next chapter for some guidelines.

5. Moving the Cabinet.

   » When lifting the pallet with the cabinet, always ensure that the floor jack or mechanical lift truck has fully entered under the pallet. This is to increase the stability of the cabinet and reduce the risk of the cabinet falling down. Please use a suitable extension bar when necessary. During the moving of the cabinet, ensure there is enough distance between the supports of the pallet and the ground. Dragging the pallet against the ground will damage the pallet and possibly your new cabinet.

   » When removing cabinet from pallet or placing cabinet onto pallet, use at least two people.

6. Removing the Strapping.

   » Remove the strapping by cutting it at a safe position to prevent any scratching the surface of your new cabinet.

   » Do not discard the packaging material for your cabinet until you have checked all of the components, installed and tested the unit.

7. Lifting the Cabinet.

   » The cabinet can be lifted in two sections: The HEAD unit and ENCLOSURE.

   » Install the cabinet on the existing work surface or Cole-Parmer support stand (if ordered).

Note:

   » When installing the cabinet onto an existing work surface, ensure that the structure can safely support the combined weight of the cabinet and any related equipment. Some modifications to the work surface may be necessary.

   » The work surface should be smooth, non-porous and resistant to the disinfectants and chemicals used in conjunction with the cabinet.

2.2 Packaging Contents

The following items are included with your manual:

• Test Report

In case this manual and/or test report is lost or misplaced, the factory retains a copy in our files. A replacement copy can be obtained by contacting Cole-Parmer and providing the cabinet model, serial number and a brief description of the information desired.

III . Installing Your Cabinet

3.1 Choosing a Suitable Location

Location impacts the nature and extent of external airflow disturbances, which may affect performance of the cabinet when it is exposed to these disturbances.

When installing the cabinet, it should be located as far away as possible from sources of airflow disturbance and in an orientation which optimally shields the airflow of the cabinet from all external airflow disturbances. Please note that the cabinet should not be placed close to another cabinet.

Please follow these guidelines when choosing a suitable location for your cabinet:

- The location must be far away from:

  » Personnel traffic flows.
  » Air vents (in and out).
  » Doors and windows.
  » Any other sources of disruptive air currents or air drafts.

- If drafts or other disruptive air currents exceed the face velocity of the filter, the potential exists for contaminated air to enter the work zone of the cabinet.

- A minimum distance of 50 cm (20 in.) to the top of the ceiling is recommended for blower changing purposes.

- A clearance of 183 cm (6 ft) in front of the cabinet is strongly advised in order to maintain proper airflow.

- Please permit adequate space for cleaning behind the cabinet.

3.2 Environmental / Electrical Conditions

The equipment is designed to be safe for at least the following conditions:

» Indoor use.
» Altitude < 2,000 m (6,562 ft).
» Temperature range 5ºC to 40ºC (41ºF to 104ºF) ambient.
» Relative humidity <80% up to 31ºC (88ºF) decreasing to <50% at 40ºC (104ºF).
» UL Installation Category II.
» UL Pollution Degree 2.
» Continuous operation.
» Electrical supply tolerance of –10% / +10%.
» 120VAC, 60Hz, 10A or 230VAC, 50Hz, 5A.
» Fuse: 250V, 10A, Time Lag for 120VAC or Fuse: 250V, 5A, Time Lag for 230VAC.
» Always ensure unit is connected to a reliable and properly grounded receptacle.
» Appliance inlet on this device is the disconnect device; appliance should not be positioned so that it is difficult to operate it.

Power Cord:

» 1) For units intended to be operated at 120 volts (North America): Use a UL-listed and CSA-certified cord set consisting of a minimum 18 AWG, Type SVT or SJT, three-conductor cord, a maximum of 15 feet in length and a parallel blade, grounding-type attachment plug rated 15 amperes, 125 volts.

» 2) For units intended to be operated at 230 volts: Use a cord set with a grounding-type attachment plug. The cord set should have the appropriate safety approvals for the country in which the equipment will be installed.

3.3 Installing Your Cabinet

1. Please refer to .
2. Inspect your cabinet carefully. Should you find any defect please contact customer service.
3. Peel off any protective masking that was left on the cabinet during manufacturing.
4. Wipe down the interior and exterior of the cabinet with water or a mild household detergent.
5. Connect cabinet to the main power supply and turn on the blower. Each cabinet requires its own dedicated 13A (230V) or 15A (115V) power outlet which should not be shared with other appliances.

WARNING! Do not move the cabinet without observing the following precautions:

- Observe the necessary precautions when relocating the cabinet, as it is heavy.

- Warning - Tipping Hazard. Pushing high up on the unit may cause system to tip over. Be careful when moving. Move with assistance only.

3.4 Set Up

Your Cole-Parmer product is shipped in two parts. The following instructions and photos (shown is 78900-02) explain how to:

Assemble the base "enclosure" and place the head unit (fan and controls) on top:

- Fit the main filter and the pre-filter.
- Fit the optional airflow meter.
- Adjust the fan-speed/airflow control.
- Adjust the "low airflow alarm".

Prior to beginning assembly, ensure the following:

1. Area is free of obstructions, tripping hazards, etc.
2. Ample clearance is available on sides and overhead.
3. Appropriate number of personnel are on hand: two people recommended.

Fume Hood Assembly

1 Unpack fume hood enclosure and set on top of casework. In most cases the enclosure is shipped fully assembled. If unit is flat packed, please follow "flat-packed enclosure assembly sheet".

2 Unpack fan/filter module (aka head unit). Lift head unit above and onto enclosure, allowing airflow sensor/wire harness to hang inside the enclosure.

Please allow a minimum clearance of 150 mm (6 inches) between the right hand side of the unit and any adjacent wall to allow the detachable power supply cord to be disconnected from the power source.

Warning – Tipping Hazard. Please ensure that all end rails of your unit are completely on workbench and do not overhang the workbench in any location.

Filter Installation

3. Pre-filter tray now inserts into four slots on the sides of the cutout. Two tabs are bent at 90° to allow it to hinge down into the workzone. Once installed, lay the pre-filter on top of the tray.
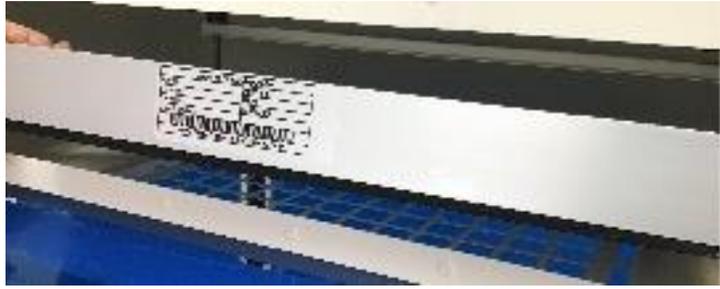

4. Main filter now requires a painted metal "hat" frame to be placed on top of the filter(s) before lowering the clamping bar to secure them in place.

5. Remove the filter access door using the barrel key provided.

6. Insert the main filter, gasket side down, centering it over the cutout.

7. If using two filter types, stack the second filter on top of the first with the gasket side down. Make sure the corners are squared up to ensure proper installation.

8. Place the white metal hat frame on top of the filter.
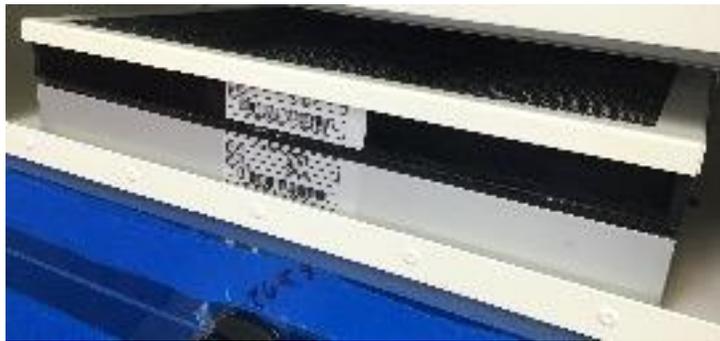
9. Rotate the black knobs inside the compartment to lower the clamping bar. The filter gasket should compress and the filters should not wiggle if you attempt to pull/push on them.

10. Reinstall the filter door and secure the locks using the barrel key.

Final Assembly
Monitair and Autocal Equipped Units

11. To install the airflow sensor, remove the clear panel on the inner right sidewall. Open the screw cap on the outside of the enclosure, undo the screw and nut and set aside. DO NOT DISCARD!

12. Remove any tape on the airflow sensor which is used to protect the sensor wires. Install the sensor by attaching to the enclosure with the screw and nut.

13. If not already installed, slide the polypropylene spill tray into the enclosure. The side with the extended handle/lip should go toward the back of the hood.

Warning - Once installed do not remove spill tray from enclosure. Do not use tray like a drawer. Do not push down, lean on or apply excessive force. Tray is only intended to sit over existing work surface.

14. Attach the power cord to the inlet on the right side of the head unit and connect to appropriate power source.

DWYER Equipped Units

15. Add airflow meter as follows:

○ Insert vane/film into the airflow meter.

   a. Slide out vane holder from side of meter (just below the screw).

   b. Carefully remove vane from plastic bag and cardboard envelope (two vanes are enclosed, one is a spare). Hang the vane by the wire in the two slots provided in the vane holder.

   c. Slide the vane holder back into the meter.

○ The enclosure design allows the airflow meter to be fitted to either side of the enclosure as required.

Ensure that the side not to be used has the airflow opening covered by the supplied blanking plate. The side to be used should have an open hole to fit the meter.

○   Remove the attaching screw from the meter.

○   Push the screw into the screw hole from the outside of the enclosure.

○   Align the meter to the screw from the inside of the enclosure.

○   Tighten the screw to secure the meter in place.

NOTE: The meter is now ready to take readings. It is pre-calibrated. If the vane becomes damaged, it is easily replaced with the spare vane. The vaneometer is accurate to ± 5% of full scale from 0-100 fpm and ± 10% from 100 fpm to 400 fpm. The permanent mounting bracket provided in the box is not used.

16. Removable yellow caps are provided in the rear wall of the enclosure to allow cables and hoses to be fed inside of the enclosure as required; refit the yellow caps when the holes are not in use.
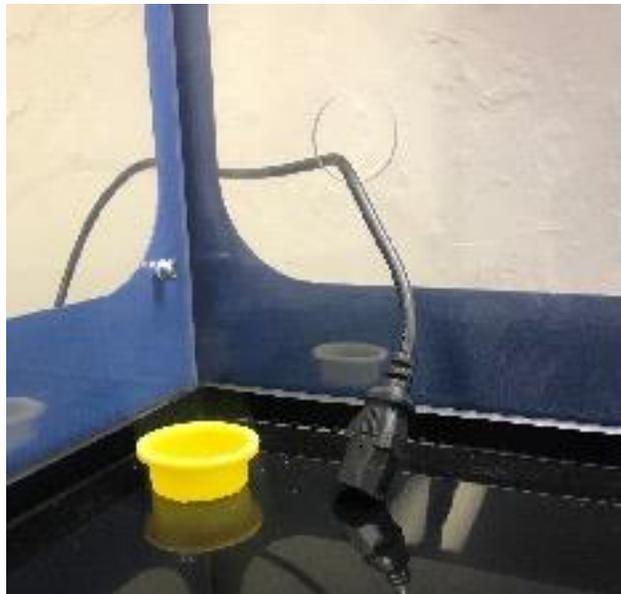
17. To calibrate the "low airflow alarm "(see Calibration - page 25), use a small Phillips screwdriver to adjust the screw inside the calibration port. NOTE: Adjustment screw is made of nylon, so please use care not to damage the screw.

Calibration Port
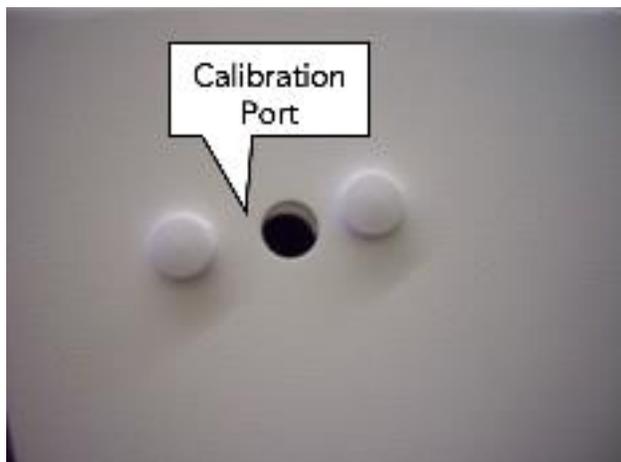
Exhaust Plenum Installation

(RX and NANO Fume Hoods Only)

1. Place the plenum in the correct orientation on the metal top panel of the fume hood.

2. Insert the provided self-tapping screws into each hole in the plenum housing.

3. Use a drill with a nut driver to tighten down the plenum.

Waste Chute Installation

(RX Fume Hoods Only)

1. Locate the blanking panel currently installed on the side of the fume hood.

2. Remove the mounting screws in each corner of the blanking panel and disconnect the panel from the fume hood.

3. Align the waste chute on the outside of the fume hoods, matching the mounting holes with the existing holes in the side of the fume hood.

4. Insert the mounting screws and tighten down evenly (screw heads can be oriented to the inside or outside of the fume hood).
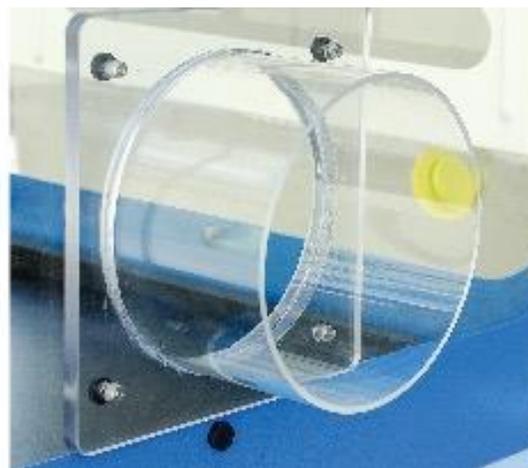
Balance Enclosure Assemly

(RX and NANO Fume Hoods Only)

1. Stand up the rear baffle; it will pivot from an attached hinge located on the left and right side panels.

2. Align the tabs for the rear baffle into slots in the top baffle keeping the 1/4 turn clips facing down. This will support the rear portion of the top baffle and keep the rear baffle in the upright position.

3. Secure top baffle with brackets on the left, right and front sides.

4. Secure the baffle to the brackets using 1/4 turn clips. They are accessed from the bottom side of the baffle.

3.5 Performance Validation / Certification

After installation and prior to use, cabinet performance must be validated and certified to factory standards. The following tests should be performed:

Airflow Velocity

The testing methods and equipment required are specified on the test report. It is recommended that these tests be performed only by a qualified technician who is familiar with the methods and procedures for certifying these types of cabinets.

3.6 Importance of Performance Validation / Certification

An airflow velocity value that falls below the value specified inside the test report will not provide adequate operator protection.

3.7 Disclaimer
The performance of the cabinet, while rigorously evaluated at the factory, cannot be guaranteed after transit and installation. Therefore the on-site testing is always recommended.

IV . Operating Your Cabinet

4.1 Control System

Basic Control Panel (Standard)

Main On / Off for Light and Fan
Press the switch up to turn on. The green indicator lamp will illuminate to confirm the power is on. The fan will start and the internal task light unit will illuminate.

Low Airflow Alarm
The alarm status is displayed on the control panel. In normal operation the lamp will not illuminate. If the airflow falls below the pre-set point, the lamp will illuminate red. This alarm may be tested and calibrated.

4.2 Cabinet Operating Procedure

- The fume hood should only be operated with the correct filter installed for the application. Refer to Filter Information - page 27 for further information. The ductless fume cabinet must not be used for laboratory work in which chemicals of different types are used that do not match the filter type or that the primary chemicals and their byproducts are not known. The ductless fume cabinet should not be used for different chemical processes where chemicals from the different processes could react in the filter.

- To start the system, apply power to the system and switch on the green power On/Off switch. The lights and fan will automatically turn on.

- Check the airflow and the filter condition of the cabinet on a regular basis. This is covered in Maintenance - page 21.

- Please note, filter blocks do not absorb carbon monoxide or hydrogen. Small quantities will not cause hazards because of the large dilution factor from the amount of air passing through the cabinet and the retardation of the chemical in the filter matrix.

- Cole-Parmer fume hoods have been designed to handle fumes and vapors given off during everyday laboratory procedures. These will be at the parts per million (PPM) level in the air stream entering the filter block. It is not recommended that large quantities of solvents or acids be used or boiled off in the cabinet.

- In the event of a large spillage in the cabinet, the amount of fumes entering the filter block may temporarily reduce the efficiency of the filter. For this reason any major spillage must be cleared up immediately, preferably using spillage absorption granules rather than paper, which may aggravate the evaporation of toxic fumes from the spillage area.

- Following a major spillage, the filters must be changed, as the heat of wetting may reduce the efficiency of the filter. After a period of stabilization, the old filters may be reused, providing they have not reached the saturation level.

- The electrical equipment in the cabinet such as the lights and controls are not in the dirty air stream of the system. The system should not be used in a flammable room atmosphere. Special modified cabinets can be provided for use in these areas. Contact Cole-Parmer for further information on these applications.

- Operators should avoid sudden movements within the fume cabinet, such as rapid opening or closing of the sash window, as this may cause temporary reversal of the airflow.

- The operators should maintain the normal safety equipment and procedures for dealing with hazardous chemicals.

⚠️
WARNING!

- » Do not use a gas flame (Bunsen burners) whenever possible, as it interferes with airflow.
- » Do not change the original blower speed of the cabinet unless the change is required by a decrease in measured air velocity. Adjustment should be made only by a qualified technician. Do not operate the cabinet if fan fails to run.
- » Minimize arm movement. Move arms in and out of the cabinet slowly to avoid disrupting cabinet airflow.
- » Use absorbent pads on the work surface where appropriate to minimize splatter and aerosol generation in case of spillage.
- » Keep lids/covers on all containers, dishes or sample plates.

Ⅴ. Monitoring

5.1 General

The purpose of the monitoring program is to ensure consistent reliability from the system. This is achieved by checking the following:

» If the pre-filters become blocked, the velocity of the cabinet will begin to fall and will eventually cause the airflow alarm to illuminate.

» Manual checking of the main filters by the use of a Gastec™ or Draeger™ test kit will confirm the condition of the filters.

5.2 Manual Monitoring

Manual monitoring of the cabinet should be carried out at least once per year, as this will ensure the monitoring systems are all within calibration and performing correctly.

Airflow Measurements
The inflow velocity of the hood should be checked with the sash at the correct operating height using an anemometer such as a hot wire, vane anemometer or propeller type. Depending on the size of the cabinet, a series of readings are to be taken at the front opening; these are to be recorded on a service sheet or system log sheet.

Manual Filter Testing
The condition of the filter is to be checked using a Gastec or Draeger test kit. Boiling off a suitable chemical normally used in the cabinet or a controlled release should challenge the filter. Examples can include alcohols, toluene and trichloroethylene.

For testing acid filters (acid adsorbing) or multi combination layered filters incorporating an acid layer, use sulfur dioxide gas (SO_2) at 2 bubbles per second through water.

The readings should be below your Country's Occupational Exposure Limit (see Filter Information - page 27). The results are to be recorded on a service sheet or system log sheet.

If a significant amount of chemical is noted at the exhaust of the system, the main filters should be changed.

VI . Maintenance

6.1 General

In some countries it is mandatory to maintain written records of checks, tests and repairs carried out on safety equipment. These records must be kept for 5 years. A full list of Occupational Exposure Limits should be obtained from your safety officer.

Regular preventative maintenance on the cabinet will reduce the possibility of hazard to the operator and ensure reliable performance from the cabinet.

⚠️

WARNING! Before attempting inspection and repairs to the cabinet, please ensure main power to the system has been removed and that the power lead has been removed. It should also be noted that fume cabinets are sometimes used to contain and protect users of the cabinet from hazardous or harmful substances. Before commencing this schedule it is important to ensure the cabinet is safe to work on.

6.2 General Cleaning

Wipe down the unit with only soapy water.

6.3 Pre-Filters

Check condition and replace if required.

6.4 Lights

Ensure that the light diffuser is clean before switching the system on. Check that the light is in working condition.

6.5 Airflow

Check and record the inflow air velocity at the working aperture as follows: Using a calibrated hot wire or vane anemometer or similar approved airflow meter, take a minimum of 5 readings across the fume cabinet aperture as shown below. Calculate the average airflow, which should be greater than 0.5 m/sec or 100 fpm +/- 10%.
The readings should be recorded on the service sheet or system log.
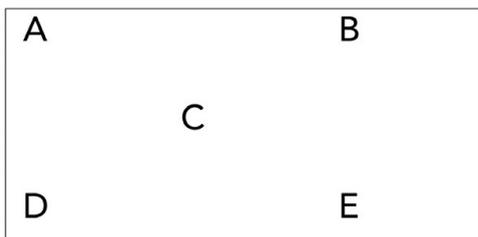
$$\frac{A+B+C+D+E}{5} = Average$$

6.6 Calibration Instructions

Testing the Low Airflow Alarm

» Ensure the fitted pre-filters are new. Switch on the cabinet; the red/amber neon should not be illuminated.

» Switch the unit off. Block the pre-filter using paper or cardboard to permit airflow of <0.3 m/sec or 60 fpm.

» Switch the unit on. The red/amber neon should illuminate. If not, the calibration should be reset.

Calibration
The low airflow alarm operates using a differential pressure switch to detect a "high vacuum" situation when the pre-filter is blocked or blocking up. The pressure switch is calibrated and tested prior to leaving our factory and under normal circumstances will not require any adjustment.

» With the cabinet running and the pre-filter blocked as described above, locate the grey pressure switch through the hole in the right hand sidewall. Adjustment is made by turning the small screw in the end of the switch. (See Photograph #16 - page 14).

» Adjust the screw to make the alarm show. You may have to repeat these steps to ensure an accurate setting has been achieved.

» Remove the blockage and restart the machine. The red/amber neon should not be illuminated.

6.7 Changing Out Filters

WARNING! Ensure persons removing filters are made aware of any potential hazards and that they are provided with any necessary protective clothing and equipment.

Hazards associated with the removal and disposal of used filters will depend on the application of the hood. If an activated carbon filter is used with hydrocarbon solvents, the filter will retain the solvents without loss, and can be removed in the laboratory. The used filter should be sealed into a plastic bag prior to disposal, preferably by incineration.

If the filter has contained any dangerous materials such as asbestos dust or radioactive chemicals, operator protection is advised, including the use of a respirator. The used filters may require disposal by a specialist company.

NOTE: CONSULT YOUR SAFETY OFFICER OR INDUSTRIAL HYGIENIST BEFORE REMOVING OR DISPOSING ANY FILTERS.

Pre-Filters
The pre-filter is located below the main filter. Remove the perforated pre-filter tray. Remove the old pre-filter and place it into a bag. Seal for disposal. Refit the new filter and refit the pre-filter tray.

Main Carbon / HEPA Filter

WARNING! Disconnect the power supply before removing filter access cover.

- Remove the front cover to gain access to the filter. Loosen the filter clamps. Lift the filter slightly to break the seal and then withdraw the filter. Place the filter in a plastic bag. Seal the bag for disposal.

- Slide the new filter into position by pushing the filter fully into the module. Refit the front cover and lock it in position.

- Please note, sometimes after new filters are fitted, it may be necessary to recalibrate the airflow system. This procedure can be found in .

6.8 Airflow Adjustment

The speed controller on the cabinet can be accessed behind the main control panel.

6.9　Maintenance Schedule

Please follow the suggested maintenance schedule in order to maintain your Cole-Parmer cabinet at its optimum performance.

Monthly

1. Using a damp cloth, clean the exterior surfaces of the cabinet, particularly the front and top of the cabinet, to remove any accumulated dust. When needed use soap or other household mild detergent.

Quarterly

1. Replace pre-filters.
2. All monthly activities.

Annually

1. Replace all main HEPA or carbon filters.
2. All quarterly activities.

Biannually

1. Replace the fluorescent lamps.
2. All annual activities.

6.10　User Monthly Maintenance Schedule

| **Model:** | | | **Year:** | |
| **Serial Number:** | | | **Responsible Person:** | |

Month	**Clean Exterior Surface**	**Notes**	**By Whom**
Jan			
Feb			
Mar			
Apr			
May			
Jun			
Jul			
Aug			
Sep			
Oct			
Nov			
Dec			

6.11 Fault Finding

WARNING! Before attempting any inspection or replacement of electrical components, always isolate the cabinet from the main power supply and remove the power supply cable.

Fault	Check
Low Airflow Alarm	• Check airflow at aperture • Check pre-filter is not blocked • Check fan is running • Recalibrate
Filter Saturated (Optional)	• Check filter condition with Gastec or Draeger test kit • Check filter seal • Check filter is correct for application • Check date on filter • Replace all filters
Fan not Working	• Check inlet fuse • Check any loose wires to terminal blocks • Bypass speed controller; if fan works, replace speed controller • Replace fan capacitor • Replace fan

6.12 Component Changing

SHOULD ONLY BE CARRIED OUT BY TRAINED PERSONNEL

WARNING! Ensure main power supply has been removed prior to any work being carried out.

Light Units

To change a light unit, use the following instructions:

1. Ensure the power cord has been disconnected from the wall outlet.
2. Using the key supplied, unlock both ends of the blue cover door to access filter compartment on head unit.

VII . Filter Information

Filter Types

Cole-Parmer offers different types of activated carbon and particulate filter media. These formulas can be customized or layered into combinations to best suit your specific application. HEPA filters are available for applications involving particulates and can be combined together with any of our activated carbon filters.

7.1 Filter Descriptions

Carbon Filter Organic Solvents	78900-13
Carbon Filter Acids Sulfur	78900-14
HEPA Filter Powder Particulate	78900-15
Carbon Filter Formaldehyde	78900-16
Carbon Filter Ammonia Amines	78900-17
6 Prefilters for Basic Ductless	78900-18

VIII. Product Specifications

24
78900-00
78900-01

36
78900-02
78900-03

48
78900-04
78900-05

Side View
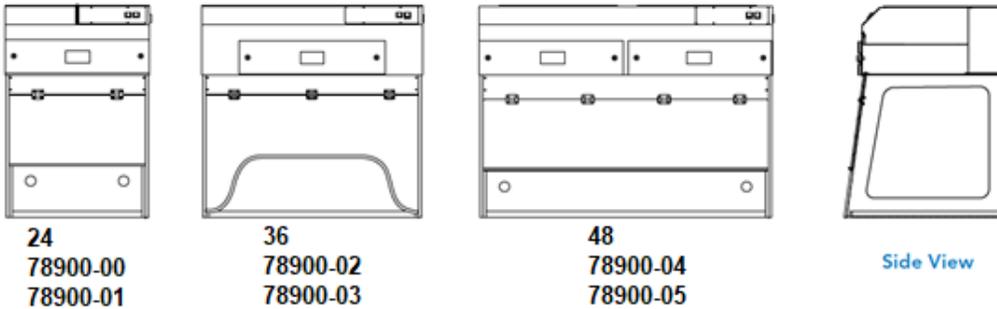
MODEL	DIMENSIONS			WEIGHT (lbs/Kg)	
	Internal Height	External (W x D x H)	Shipping (W x D x H)	Net	Ship

Standard Depth Models (XT)

-24-	24" / 610 mm	24" x 27" x 35" / 610 x 676 x 889 mm	40" x 40" x 40" / 1016 x 1016 x 1016 mm	72 / 33	129 / 59
-36-	24" / 610 mm	36" x 27" x 35" / 914 x 676 x 889 mm	40" x 40" x 40" / 1016 x 1016 x 1016 mm	99 / 45	157 / 71
-48-	24" / 610 mm	48" x 27" x 35" / 1219 x 676 x 889 mm	45" x 55" x 40" / 1143 x 1397 x 1016 mm	138 / 63	195 / 88

Specifications are subject to change without notice.

Model	24	36	48
Airflow CFM	135.9	206	281.25
Face Velocity FPM	100	100	100
Noise, dBA, 1 meter	< 50	< 50	< 53
Lighting	<··· Compact fluorescent lamp. ···>		
Construction	<··· White epoxy coated steel frame and head unit. Clear sides and back panel. ···>		
Blower	<··· ebmpapst™ centrifugal fan. ···>		
Electrical	<··· 120V, 60Hz or 220V, 50Hz voltages available. Specify when ordering. Other voltage options available. ···>		
Electrical Switches	<··· Main On/Off ···>		
Monitoring	<··· Low airflow alarm, standard. ···>		

Filter System Specifications

Pre-Filter	Electrostatic, 1 lbs/ .45 kg (nominal)		
Main*	(1) 11 lbs / 5 kg	(1) 11 lbs / 5 kg	(2) 22 lbs / 9.6 kg
Activated Carbon	FILTCO™ Sourced. A single carbon filter containing activated carbon granules chemically formulated to capture one or more specific vapors or family of vapors		

Standard Accessories

Spill Tray	Polypropylene spillage tray, available in white or black, slides out for easy cleaning.
Dwyer Air Flow Meter	Continuous display of face velocity.
Stainless Steel Hanging Rod and Clips	Hanging rod spans the width of the cabinet.
Base Stand, Mobile, with Casters	Provides a lower storage shelf; accommodates wheelchair access. Locking casters fix the hood in place.
Filter Saturation Alarm**	An electronic gas sensor emits audio and visual alerts when the main filter needs to be changed.

* Single stack; double stack doubles weight of all (i.e. 22, 22, 44).
** Factory installed; specify when ordering.

Cole-Parmer

625 East Bunker Court
Vernon Hills, IL 60061-1844
Ph: 1-800-323-4340
Fax: 1-847-247-2929

www.coleparmer.com
info@coleparmer.com

78900Basic_rev_1.0