# BEAM USER MANUAL

Central Vacuum System



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# INTRODUCTION

Congratulations on your purchase of a new BEAM Central Vacuum System. It is the built-in cleaning appliance designed to help you clean your home efficiently and effectively. Unlike conventional vacuums that can recirculate dust, a BEAM system lifts dirt, dust mites, pollen, dander and other allergens from floors, curtains, furniture and other surfaces, and carries them away from living areas to help improve indoor air quality. It has been clinically proven to relieve allergy symptoms.

To obtain the maximum benefit from your BEAM System, please read this manual carefully prior to use. Then enjoy cleaner, healthier living and years of trouble-free performance.

For more information on BEAM Central Vacuum Systems and other innovative BEAM products, visit beamvac.com

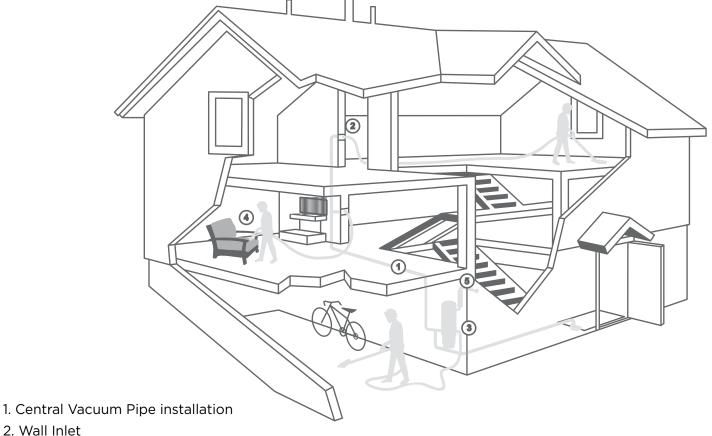
#### Components of a BEAM Central Vacuum System

Power Unit/Dust Collection Receptacle: Mounted in the utility room, basement or garage, it removes dust, dirt and allergens from living areas.

**Tubing:** Dust and dirt are carried through tubing from "inlet valves" to the power unit/receptacle.

Inlet valves: Installed in the wall, each inlet valve connects the power brush and flexible cleaning hose to the tubing in your home.

Cleaning tools: Flexible hose and tools make whole house cleaning easy.



- 3. Power Unit
- 4. Filtered Separator
- 5. External Exhaust



# IMPORTANT SAFEGUARDS

When using an electronic appliance, basic precautions should always be followed, including the following: **READ ALL INSTRUCTIONS BEFORE USING THIS VACUUM SYSTEM.** 

#### To reduce the risk of fire, electric shock or injury:

- Do not use outdoors or on wet surfaces.
- Do not block the motor hood or ventilation openings and duct on the top of the power unit.

  Lack of ventilation airflow will cause the motor to overheat.
- Do not locate the power unit in a high temperature area or where it is inaccessible, for example, an attic or crawl space.
- Mount the power unit no less than 30 cm from the ceiling or any adjacent wall and at least 70 cm from the floor. Additionally, review any local codes and regulations that may apply.
- This appliance can be used by children aged from 8 years and above and 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.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- Unplug before cleaning or servicing the central vacuum.
- Use only as described in this manual. Use only manufacturer's recommended attachments.
- Do not use with damaged cord or plug. If vacuum cleaner is not working as it should, has been dropped, damaged, left outdoors or dropped in water, return it to a service center.
- Connect to a properly grounded outlet only (refer to grounding instructions).
- Do not use extension cords or outlets with inadequate current carrying capacity.
- Turn off all controls before unplugging.
- Do not unplug by pulling on the cord. To unplug, grasp the plug, not the cord.
- Do not handle plug or cord with wet hands.
- Do not put any object into openings. Do not use with any openings blocked; keep free of dust, lint, hair and anything that may reduce airflow.
- This vacuum cleaner creates suction. Keep hair, loose clothing, fingers and all parts of body away from openings and moving parts.
- Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
- Use extra care when cleaning on stairs.
- Do not pick up flammable or combustible liquids such as gasoline, or use in areas where they may be present.
- Keep your work area well lighted.
- Unplug electrical appliances before vacuuming them.
- If the supplied power cord is damaged, it must be replaced by a special cord available from the authorized local dealer/distributor.
- Do not use without dust bag and/or filter in place.

### **SAVE THESE INSTRUCTIONS**



Waste of Electrical and Electronic Equipment (WEEE) The symbol on the product or on its packaging indicates that this product may not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about recycling of this product, please contact your local waste disposal service or the shop where you purchased the product.



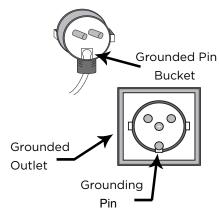
# **GROUNDING INSTRUCTIONS - WARNING**



#### **WARNING**

This appliance must be grounded, if it should malfunction or breakdown, grounding provides a path of least resistance for the electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment grounding conductor and ground plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

**WARNING:** Improper connection of the equipment - grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance - if it will not fit the outlet; have a proper outlet installed by a qualified electrician.



**WARNING:** If the supply cord is damaged, it must be replaced by a special cord available from your local authorized dealer/distributor.

#### **GENERAL INFORMATION**

The central vacuum system is designed for dry pick up of household dirt and dust. Avoid picking up hard or sharp objects with the system to prevent hose and plastic pipe damage or clogs. This central vacuum system is intended for Household Use.

#### **Power unit**

Your power unit is equipped with a 230/240-volt motor and employs an overload protection device, which can be reset should the motor be overloaded causing the circuit to open. It is normal for some dirt and lint to cling to the filter. However, the filter should be checked occasionally to be sure it has not been punctured or torn. The dirt receptacle should be emptied 2-3 times a year on the average depending on the amount of use. For best results, empty the canister when it is about half full. Any dirt spilled can be vacuumed up quickly by plugging the hose into the nearest inlet valve. The on/off button on the power unit will start and stop the power unit. No part of the unit requires lubrication.

#### **Service Information**

The instructions in this booklet serve as a guide to routine maintenance. For additional information, contact your nearest authorized dealer/distributor.

DO NOT OIL THE MOTOR AT ANY TIME. IT IS PERMANENTLY LUBRICATED AND SEALED.

#### **Rating Plate**

The model, type and serial numbers are indicated on the rating plate located on the control panel or motor hood. For prompt and complete service information, always refer to these numbers when inquiring about service.



# INSTALLATION

#### **Planning**

If your home already has the system of plastic pipes and inlet valves, you are ready to install the power unit (refer to Install Power Unit section below). If not, you can contract to have the system installed by a professional or you may choose to do-it-yourself. If you plan to install the system yourself, it is important to carefully plan the location of each inlet valve, the power unit, and the network of plastic pipes. This booklet only deals with the installation of the power unit; "How-To" booklets are generally included with installation kits. Careful planning will help you determine the installation kits to buy.

The kits should contain enough plastic pipe and fittings, and inlet valves for your needs. Check with your local dealer/distributor if you have any questions.

#### **Power Unit Location**

**NOTE:** Mount power unit at least 30 cm from the ceiling and any adjacent wall, at least 70 cm from the floor and within 1.8 m of an electrical outlet. Review any local regulations that may apply.

The power unit should be located as far away from the general living are as possible, yet accessible so you can remove the dirt receptacle, reach the filter, and inspect the power unit. A typical location would be in a garage where you could vacuum your car or garage area and where emptying the dirt receptacle and cleaning the filter would be more convenient. Other suitable locations are in the basement, laundry room, or ventilation storage room.

#### **Install Power Unit**

You are now ready to install the power unit. Be sure the power unit will be located at least 30 cm from the ceiling and any adjacent walls and at least 70 cm from the floor. The motor hood ventilation should never be obstructed.

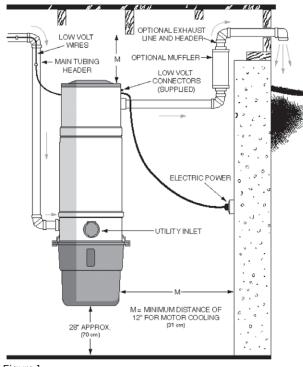


Figure 1

Check to be sure you will be able to occasionally remove the dirt receptacle, reach the filter, and inspect the power unit. In the chosen mounting location, compare the distance between the wall studs and the power unit mounting brackets. If the mounting bracket cannot mount on one of the wall studs, mount the two boards horizontally between the studs and then attach the mounting bracket to these. Once the bracket is on the wall, you can now hang the power unit. With the unit on the wall, align the power unit intake fitting with the main pipe projecting from the wall and connect these together. DO NOT GLUE.



#### WARNING

Do not block the hood ventilation openings on the top of the power unit. Lack of ventilation will cause the motor to overheat.

Do not locate the power unit in a high temperature area where it is inaccessible for example, an attic or crawl space.



# **HOW TO USE**

Locate the two low-voltage wires near the main pipe. Remove the insulation from the low-volt wire. Insert the low-volt wire into the spring-loaded low-volt connectors (refer to figure 2). Be certain you comply with your local electrical codes and regulations. The power cable has a three-prong-style connector on one end. This connector must be plugged into the matching connector on the power unit. Plug the other end of the power cable into the wall electrical outlet. You are now ready to check the installation of the unit:

- Plug the hose into each inlet valve to be sure the electrical contacts operate properly.
- Check the inlet valve for air leaks.
- Check each pipe connection for air leaks.
- Be sure the dirt receptacle is properly secured to the power unit.
- Be sure the filter is properly installed in the power unit.

Your cleaning system is ready to use.

Your central vacuum system starts and stops automatically.

To turn the system on, plug the hose into a wall inlet valve. To turn it off, remove the hose from the valve (refer to figure 3). Optional hoses may include an on/off button on handle for added convenience.



Figure 2

#### **Electrical Fault Protection**

The central vacuum system employs features that monitor the following operating levels: AC voltage, current draw and circuit board temperature. If the voltage is below or above standard operating voltage, high current draw or locked rotor, the power unit will not operate. In this case the LED next to the On/ Off button will blink or go out until the problem ceases. In the event any one of these problems happening, make sure all low-volt switches are in the OFF position, then press the on/off button, unplug hose, or wait for temperature to lower. If problems persist, contact the authorized service center nearest you.

In the case of power failure, the power unit will return to its previous state when power returns. For example, if a hose is plugged in with the hose switch on, or a straight air hose is plugged into a wall valve, then the power unit will turn back on. If the power unit was turned on at the unit prior to power loss then the unit will not turn back on.



Figure 3

#### Inlet Valves

Plugging the hose into an inlet valve complete a low-voltage electrical circuit which activates a relay and turns on the power unit. To turn off the power unit, unplug the hose from the inlet. When unplugging the hose, hold the inlet cover open for a few seconds to allow suction to decrease and protect the inner seal.

An obstruction in the inlet valve may cause the power unit to continue to run after the hose has been removed from the inlet. To shut down the power unit, check all the inlet valves and remove obstructions.



#### **MAIN SCREEN**

The main screen is shown when the system is connected to an electrical outlet. This is the view most often displayed. On this screen you see the time, temperature and system performance.

At the bottom of the screen you see from left to right, the power (o) icon, the left  $(\leftarrow)$  and right  $(\rightarrow)$  toggle arrow icons and the Enter $(\leftarrow)$  icon. To scroll through the LCD menus, the button directly below each corresponding icon will execute the navigational feature.

#### **USER SETUP**

Your LCD enabled power unit provides the ability to customize the temperature and time formats. Formats can be customized using the USER SETUP menu. To enter the USER SETUP menu, press the <Enter> button.

#### **Temperature Customization**

Use the Left and Right toggle buttons to select the temperature format of either C or F. Once the correct format has been selected, press the <Enter> button to proceed to the next screen.

#### **Time Format Customization**

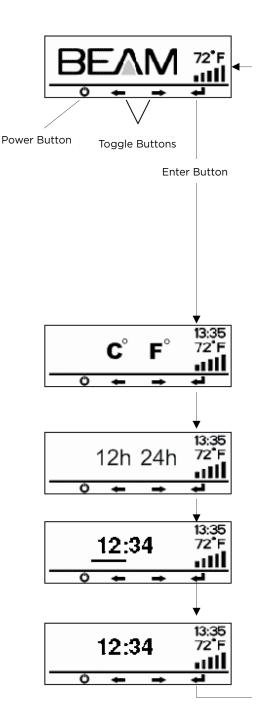
Use the Left and Right toggle arrows to select the temperature format of either 12 hour or 24 hours. Once the correct format has been selected, press the <Enter> button to proceed to the next screen.

#### **Time Setting**

The time can be changed by using the Left and Right toggle buttons. The first number field in the display is underlined with a bar, indicating that it can be adjusted with the toggle buttons. Press the <Enter> button to proceed to the next number field.

#### **Review User Setup Settings**

The next screen displays the temperature and time with the user selected formats. Press the <Enter> button to return to the Main Screen





#### SYSTEM CHECKS

The system checks menu provides the ability to monitor overall system. Specific areas monitored are the Empty Dirt Receptacle, Airflow Level, Motor and Electrical System, and Service Indicator. The happy face indicates that each monitored aspect of the power unit is optimally performing. Use the right and left toggle buttons to scroll through the SYSTEM CHECK screens.

#### **Main Screen**

#### **Dirt Receptacle and Happy Face**

The above display denotes that the dirt receptacle does NOT currently need to be emptied.

#### Three to Five Performance Bars and Happy Face

This display indicates the system is performing at the optimal airflow level. The power unit motor is operating at peak or optimum performance when all five power bars are illuminated. Normal operating performance is when three to five bars are shown. Performance levels will decrease as the filter is loaded with debris or as the motor has significant wear. Fewer bars will be illuminated as performance decreases. When the power unit is off, the display will illuminate the airflow level of the last operating cycle. **Note:** It is also normal to see changes in performance when specialty attachments are used.

#### **Motor Icon and Happy Face**

This display indicates all electrical and motor components are functioning properly.

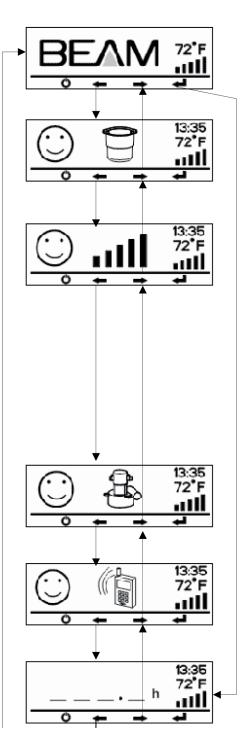
#### **Telephone Icon and Happy Face**

This screen indicates that the system has NOT encountered any error conditions and it is NOT necessary to call for service at this time.

#### **System Run Time**

This display shows you the overall number of hours that the power unit has operated.







#### SYSTEM ALERTS

Your LCD enabled power unit is constantly monitoring the system status. In the event of an error condition, a system alert will be displayed on the LCD in place of the Main Screen.

The sad face indicates that the power unit has experienced an error condition. The power unit may display the following Alerts:



# Main Screen Appears Flashing If the power unit receives an excess of electricity such as an over current situation, the Main Screen will start flashing.

The flashing Main Screen indicates that the power unit has automatically recovered from an error situation and will operate properly when powered on.

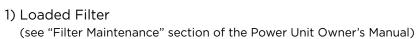


#### **Bucket Icon with Sad Face**

This screen will be displayed when the dirt receptacle needs to bechecked for emptying. After checking(and possibly emptying) the bucket, press the <Enter> button to return to the Main Screen. This will reset the timer for the bucket monitor.

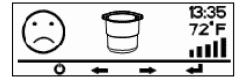


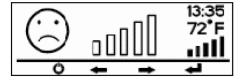
This screen is displayed when the power unit motor is unable to operate at optimal system performance. When only 2 bars or less are illuminated, the airflow is restricted, meaning the vacuums cleaning power has decreased. If the remaining bars are flashing, the airflow restriction has been present for more than 12 minutes of vacuuming and attention is urgent. Air flow can be restricted by several factors:



- 2) System Blockage (see "Trouble Shooting" section of the Power Unit Owner's Manual)
- Motor Wear (contact an authorized Beam service technician)

The most common cause is a loaded filter, and the system performance can be restored by cleaning the filter. Alternatively, there may be a system blockage, and the hose and piping system needs to be checked for blockage.







#### **Motor Icon with Sad Face**

This screen indicates that the motor has shut down due to an electrical fault. When the system experiences an electrical failure it will attempt to automatically reset after a 15 to 30 second delay. Once recovered, the display will return to the flashing Main Screen, indicating that the power unit has been reset and will operate properly when powered on.

In the event that the system is unable to automatically reset, the display will switch to the Phone Icon with a Sad Face screen, indicating the need to contact a Beam dealer for service. This indicates a motor failure, where service is needed.

# 13:35 72 F

#### **Phone Icon with Sad Face**

This screen will be displayed for either of two reasons:

- 1) The system experiences a failure that requires repairs by an authorized Beam service technician.
- 2) The power unit reaches 500 hours in the life-cycle when the motor brushes and filter should be checked for wear.

To resolve this system alert, contact a Beam dealer.

**HINT:** Changing the motor brushes is an inexpensive way to increase the overall motor life and is recommended after 500 hours of operation.



# **MAINTENANCE**

Instructions provided in the booklet serve as a guide to routine maintenance. Proper airflow and suction can be maintained by keeping the dirt receptacle and filter clean and the plastic tubing and hose free from clogs.

#### **Dirt Receptacle and Filter**

Reduced airflow or suction indicates the central vacuum system is not operating at maximum efficiency. If the dirt receptacle is full and the filter is clogged, no air can pass through the unit and no cleaning can take place.

**CAUTION:** Disconnect power the cord from electrical outlet before removing the dirt receptacle. Some models feature see-through windows on the receptacle to tell at a glance when the receptacle should be emptied. To remove the receptacle, grasp the handles and turn the receptacle to the left. Remove and empty the contents. Return the receptacle and turn it to the right (refer to figure 4). To avoid suction leakage make sure the receptacle is securely attached.



Figure 4

#### **Filter Maintenance**

BEAM's exclusive filter is permanent and self-cleaning. However, if cleaning is desired, follow the steps listed below:

**NOTE:** Do not operate this unit without the filter in place.

**CAUTION:** Disconnect power the cord from the electrical outlet before removing the dirt receptacle.

- 1. Remove the dirt receptacle.
- 2. Wrap a large plastic bag around the lower portion of the power unit and hold firmly in place.
- 3. Grasp the sewn-in weight at the bottom of the filter through the plastic bag. Shake vigorously. Dirt will fall into the bag.
- 4. Carefully remove the bag from the unit. Place the empty dirt receptacle on the power unit.

Cleaning Instruction Notice: Do not brush the filter.

**Hint:** Spilled dirt can be easily vacuumed by attaching the hose to the utility inlet on the power unit and activating the manual switch.



Your power unit may be equipped with a convenient paper bag, which can be simply discarded when full. A full paper bag will deprive the power unit of proper suction and minimizes the performance of the machine. Depending on how much use your central vacuum system it is recommended that you empty the paper bag 2-3 times per year. Replacement bags can be purchased through your authorized central vacuum dealer/ distributor.

#### How to change the Paper Bag:

- 1. Unplug the power unit from all electrical sources.
- 2. Remove the bucket.
- 3. Remove the paper bag from the intake valve. (Optional two hole bag may be used when equipped with an inlet valve on front of the unit)
- 4. Place and press the new bag into place. Turn the bag's opening to lock it into place.
- 5. Place the bucket back on the power unit.



# **TROUBLESHOOTING**

If you experience trouble with your central vacuum system, follow the suggestions below before calling for service.

#### Partial loss of suction

- 1. Clean out dirt receptacle. Inspect and clean thw filter (see Filter Maintenance). Replace dirt receptacle.
- 2. Turn ON power the unit with on/off button. Then check the suction at each inlet. If it is not the same at each one, the line is partially clogged. To locate the clogged area in the system, start with the inlet closest to the power unit and check the suction. Continue to check each successive inlet until you locate the inlet where a loss in suction is occurring. The clog will be between that inlet and the previous one you checked. To remove the clog, carefully insert an electrician's fish tape in the inlet and push the obstruction through. Or, with another vacuum, you can reverse the suction in the system to remove the clog. If neither method is successful, call your authorized BEAM dealer/distributor.
- 3. Have your authorized BEAM dealer/distributor check the gasket under the motor and the gasket located where the dirt receptacle attaches to the upper cylinder.

#### **Total Loss of Suction (with motor running)**

- 1. Check the hose for obstruction.
- 2. Turn on the power unit with the on/off button and follow the same procedure as in step #2 above. However, with a total loss of suction at all inlets, if the problem is a clog in the system, it would be located between the power unit and first inlet.

#### **Motor Refuses to Start**

- 1. Check fuses or breakers (trip switches) in the electric panels in your house.
- 2. If your power unit has a control light, the solid green light will indicate when the unit has a proper voltage and the low-voltage circuit is supplying power to the inlets.
- 3. If the green light is flashing, or does not light up, and the motor does not start, the power unit could have experienced a fault due to excessively high or low standard operating voltage, high current draw, or a locked rotor. If it also possible that the unit was powered on with a low-volt connection (i.e. Handle, vac pan, etc) in the ON position. To resolve this issue:
- a. Ensure all handles and vac pans are in the OFF position.
- b. Unplug the power unit cord from the wall outlet, and then plug in again.
- c. Press the on/off button on the power unit.
- 4. Should the light be on, but the motor starts only with the on/off button and not at the inlets, the problem is broken low-voltage wiring to the wall inlets. Call your authorized BEAM dealer/distributor.



# SERVICE INFORMATION

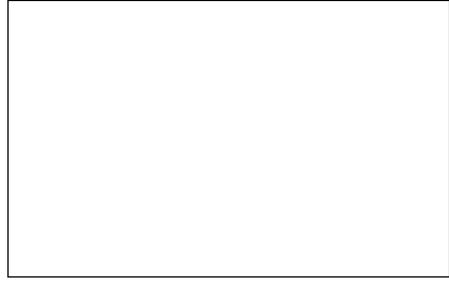
The instructions in this booklet serve as a guide for routine operation and maintenance. For more information, contact your local authorized dealer/distributor.

#### **Service Warranty**

Warranty service is managed by your local authorized dealer/distributor.

For additional product information visit beamvac.com

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