ConMed

ClearView™

Smoke Evacuation System

Operator's Manual

For a period of one (1) year following the date of delivery, CONMED warrants the ClearView™ against any defects in material or workmanship. CONMED will repair or replace (at CONMED'S option) the same without charge, provided that routine maintenance as specified in this manual has been performed using replacement parts approved by CONMED. This warranty is void if the product is used in a manner or for purposes other than intended.

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Made in USA

The revision level of this manual is specified by the highest revision letter found on either the inside front cover or enclosed errata pages (if any).

Manual Number 904568 REVA

Unit Serial Number _____

EC REP
Emergo Europe
Molenstraat 15
2513 BH, The Hague
The Netherlands

MEDICAL – GENERAL MEDICAL EQUIPMENT
AS TO ELECTRICAL SHOCK, FIRE AND MECHANICAL HAZARDS ONLY
IN ACCORDANCE WITH UL 60601-1, ANSI/AAMI ES60601-1 (2005, 3rd ed.),
CAN/CSA C22.2 NO. 601.1, AND CAN/CSA-C22.2 No. 60601-1 (2008)
9D93

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

Table of Contents & List of Illustrations

System Description
Section 1.0

1.1 Introduction

CONMED ClearView™ Smoke Evacuation Systems are intended to evacuate and filter surgical smoke plume and aerosols created by the interface surgical tools with tissue, examples being lasers, electrosurgery systems, and ultrasonic devices.

The ClearView™ Smoke Evacuation Systems have been designed with a high suction, high flow rate vacuum motor. The ultra-quiet motor is used to draw the surgical smoke from the surgical site through the vacuum tubing and into the filter where the surgical smoke is processed by a series of filters. A single disposable filter is used to simplify the installation and removal during filter changes. The filter is completely enclosed to protect the healthcare personnel from potential contamination during filter changes. One ClearView™ filter contains four different stages within to capture the smoke plume.

The first stage filtration is a prefilter whose function is to trap and remove gross particulate and casual fluid.

The second stage filtration is ULPA grade (Ultra Low Penetration Air) filter whose high-tech patented (U.S. Patent #5874052) design captures particulates and micro-organisms from .1 to .2 microns at an efficiency of 99.999%.

The third stage filtration uses the highest grade virgin activated carbon, especially designed for CONMED for the removal and adsorption of odors and toxic gases produced by burning tissues. These harmful gases may constitute a health hazard to healthcare professionals who are subjected to prolonged exposure. The activated carbon used in the ClearView™ Smoke Evacuation Systems preferentially removes toxic organic gases rather than water vapor and provides optimal odor removal.

The fourth stage filtration is an expanded foam used to trap activated carbon fines from migrating out of the filter.

The electronic controls on the face panel of the ClearView™ Smoke Evacuation System has been designed "user friendly" and facilitate unit set up and operation. Please refer to Section 2.0 for Operating Instructions.

1.2 Inspection

The ClearView™ Smoke Evacuation System has been thoroughly tested and inspected before shipment from the factory. Please check the unit before using it to insure that no damage has occurred in transit. If damage is evident, please contact CONMED Customer Service at (800) 448-6506 (United States) or +1 (315) 797-8375 (International).

In addition, please compare the accessories you receive with the standard accessories list below. If an item is missing, please notify CONMED Customer Service.

Standard Accessories:
- Operator's Manual
- Power Cord
- Pneumatic Footswitch
- Automatic Activation Device

Please contact CONMED Customer Service to purchase the following accessories:
- Replacement Filters
- Tubing Accessories
- Fluid Trap

1.3 Operational Information

The operational information contained in this section is intended for the customer review of regulatory issues. The information pertains to the use of the products both domestically and internationally:

1. CONMED ClearView™ Smoke Evacuation System(s) complies with IEC60601.1 electrical specifications in the following systems:
   100/120 VAC 50/60 Hz, 220/240 VAC 50/60 Hz

2. Type of protection against electrical shock (UL 60601-1, Clause 5.1): Class I

3. Degree of protection against electric shock (UL 60601-1, Clause 5.2); Type CF Applied Part

4. Degree of protection against ingress of water (UL 60601-1, Clause 5.3): IPX1

5. Method of sterilization or disinfection recommended by CONMED (UL 60601-1, Clause 5.4):
   Unplug Unit. Wipe unit with a damp cloth containing mild disinfectant solution or soapy water. Wipe dry with a clean cloth. Do not steam sterilize.

6. Degree of safety of application in the presence of flammable anesthetic mixture with air or with oxygen or nitrous oxide (UL 60601-1, Clause 5.5): Not Suitable

7. Mode of operation (UL 60601-1, Clause 5.6): Continuous

8. Upon request, CONMED will provide the following:
   Service and Repair Instructions, including Circuit Diagrams and Parts List

9. The fuses on the circuit board are to be serviced by an authorized CONMED technician as follows:
   100/120 VAC, 50/60 Hz use 10 Amp 250 Volt Fuse (Slo-Blo)
   220/240 VAC, 50/60 Hz use 8 Amp 250 Volt Fuse (Slo-blo)

10. The fuses on the motor curcuit are to be serviced by an authorized CONMED technician as follows: 220/240 VAC, 50/60 Hz use 3,15 Amp 250 Volt Fuse (Fast-Acting), (F3)

11. This equipment needs special precautions regarding ElectroMagnetic Compatibility and needs to be installed according to EMC information found in this manual.

12. This equipment utilizes mobile RF communications equipment that can affect medical electrical equipment.

13. This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their expense.

14. This equipment operates in the following radio frequency specifications:

    RX modulation: Pulse-width coded, AM 100% modulation
    TX Frequencies: Manchester encoded,
    A = fc =/- 423.75kHz, B = fc +/- 484.29kHz
    Low bit: transition A to B
    High bit: transition B to A

15. To isolate equipment from supply mains, unplug the power cord from the appliance inlet on the unit or receptacle in the wall. Position the equipment to allow for ease of unplugging power cord.

16. Potential Equalization Conductor: Terminal located on back panel for connection of potential equalization. Conductor complies with requirements per IEC 60601-1 (2005).

The ClearView™ Smoke Evacuation System(s) and all filters are not intended for contact with patients.

1.4 Cautions and Warnings

Please note that all Cautions and Warnings should be read and understood before any use of this equipment.

Please note that all Cautions and Warnings should be read and understood before any use of this equipment.

1.4.1 WARNINGS:

- Read this manual thoroughly, and be familiar with its contents prior to using this equipment.
- Test this equipment prior to a surgical procedure. This product was thoroughly tested at the factory before shipment.
- Disconnect the unit from the electrical outlet prior to inspecting system components.
- The ClearView™ Smoke Evacuation System is only intended and suitable for the applications that are mentioned in the operating instructions.
- **The smoke evacuator produces a strong vacuum. Adjust the airflow and the position of the inlet end of the wand or tubing to prevent patient injury and to prevent suction of surgical materials and surgical specimens.**
- **If the smoke evacuator is activated while the airflow is set to a high speed, it may produce a sudden, strong suction action. Check the airflow setting before activating the smoke evacuator to prevent patient injury and to prevent suction of surgical materials and surgical specimens.**
- **To maximize patient safety, the tubing or wand should not come into direct contact with tissue. Otherwise, patient injury may result.**
- The CONMED filters and single-use accessories are completely disposable. Please dispose of according to your local codes or regulations and hospital policy. These filters may be disposed of or incinerated, whichever is appropriate for your institution.
- Care should be taken to route the power cord, foot pedal, smoke evacuation tubing, and Automatic Activation Device cable as to not cause a tripping hazard or crimping of cords.
- Do not operate this device in the presence of flammable or explosive gases.
- To avoid risk of Electric Shock, this equipment must only be connected to a supply mains with protective earth.
- This equipment is intended for use by healthcare professionals only. This equipment may cause radio interference or may disrupt the operation of nearby equipment. It may be necessary to take mitigation measures, such as re-orienting or relocating the ClearView™ or shielding the location.
- The use of ACCESSORIES other than those specified by CONMED, or sold by CONMED as replacement parts for internal components, may result in increased emissions or decreased immunity of the ClearView™ Smoke Evacuation System.
- This equipment should not be used adjacent to or stacked with other equipment and that if adjacent or stacked use in necessary, the ClearView™ Smoke Evacuation System should be observed to verify normal operation in the configuration in which it will be used.

- Refer routine servicing to qualified biomedical technical personnel.

- Changes or modifications not expressly approved by CONMED could void the user's authority to operate the equipment.

The warranty on this product is void if any of these warnings are disregarded.

1.4.2 CAUTIONS:

- Federal law (United States of America) restricts this device to be used by, or on the order of a physician.

- Do not block either the tubing or the filter. If either becomes occluded or significantly restricted, the motor/blower may overheat and cause the unit to fail.

- Using any other filter or accessory not supplied by CONMED may cause damage and/or cause the system to be inoperable and may void the warranty.

- Care must be exercised in the installation of hoses, adapters and suction canisters. Failure to follow the procedures outlined in this manual may result in overheating of the motor and may void the unit warranty.

- This device is not intended for evacuation of fluid. If fluid is expected to be aspirated to the ClearView™ Filter, fluid collection devices must be installed with the vacuum hose assembly. Failure to install a fluid collection device could cause filter blockage and electrical damage.

- The Filter should be changed according to the life of the filter. The Filter, used with the ClearView™ Smoke Evacuation System(s), should not be used for more the time specified for each filter. Failure to change the filter may result in decreased efficiency and contamination of the electric motor, vacuum pump, and sound absorbing media within the unit.

- Do not block either the tubing or the filter during operation. An occlusion or significant restriction may cause the motor to overheat and the unit to stop working.

- The installation of this equipment must be performed such that the intake and exhaust vents located on the bottom of the system are not obstructed. Failure to properly install the unit may cause reduced performance, damage and/or cause the system to be inoperable and may void the warranty.

- The ambient temperature during operation must be kept between 50°F to 104°F (10°C to 40°C)

- The relative humidity during operation must be kept between 10% to 75%.

- An atmospheric pressure range of 700 hPA to 1,060 hPa.

- Storage environmental ambient temperature 14°F to140°F (-10°C to 60°C).
- Storage environmental relative humidity 10% to 75%.

There are no user serviceable components in the ClearView™ Smoke Evacuation System(s). Refer service to qualified service personnel.

Use only with the power cord provided and always plug into a grounded outlet.

Symbol	Description / Meaning
	DANGER HIGH VOLTAGE CAUTION - ELECTRICAL SHOCK HAZARD. DO NOT REMOVE COVER. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
	DANGER CAUTION - RISK OF EXPLOSION IF USED IN THE PRESENCE OF FLAMMABLE ANESTHETICS.
	WARNING
	CAUTION
	TYPE CF APPLIED PART
IPX1	PROTECTION AGAINST INGRESS OF WATER AS DETAILED IN IEC 60529
	ALTERNATING CURRENT
	PROTECTIVE EARTH, (GROUND)
	EQUIPOTENTIALITY
	DENOTES THE DATE THE EQUIPMENT WAS MANUFACTURED
	DENOTES THE MANUFACTURER OF THE DEVICE
	NON-IONIZING RADIATION
	CONSULT INSTRUCTIONS
	REMOTE ACTIVATOR

2.1 System Controls

The electronic system controls on the ClearView™ Smoke Evacuation System(s) are easy to understand and simple to use. The membrane control panel contains the suction on/off switch, suction power adjustment, filter life indicator, and service indicator light. See Figure 1.

Note: Please be sure to read all instructions before installing accessories or operating this equipment. Failure to do so may result in damage to the unit and/or personal injury.

- **SUCTION ON & Standby**

There is one ON/OFF button on the ClearView™ Smoke Evacuation System(s). The suction ON switch on the electronic membrane control panel is located in the upper right hand corner of the membrane panel. To power up the machine, **(|)**, connect the supplied power cord to a grounded outlet and the appliance inlet on the back of the smoke evacuation system. Once power has been applied, the yellow standby LED will illuminate on the keypad. Press the ON/OFF button on the membrane panel to illuminate the "fan running" green LED indicating active suction. Place the unit in "standby" by pressing the suction ON membrane switch to illuminate yellow STANDBY LED. Turn the system main power off, **(O),** by unplugging the power cord from the appliance inlet on the unit or the receptacle in the wall.

- **SUCTION CONTROL**
  (Membrane Control Panel)

The amount of suction may be adjusted by pressing the suction control button. Each time the suction control button is depressed, the motor speed in increased. Once the suction has reached the maximum level, depressing the button again will return suction level to lowest setting. The suction control should be set at the lowest practical setting to completely remove the surgical smoke from the operative site. Each time the arrow button is pressed, the suction will change to a different flow setting (Low/Lap, Medium, High/Turbo).

- **FOOTSWITCH / AUTOMATIC ACTIVATION DEVICE**
  (Membrane Control Panel)

The ClearView™ Smoke Evacuation System also comes equipped with a pneumatic footswitch.

A footswitch or a Automatic Activation Device may be added to any system by simply plugging in a CONMED activation accessory into the appropriate jack on the front or back of the unit. When the footswitch is plugged in, the unit may be turned on or off by depressing the footswitch pedal once for each operation. For directions on using the Automatic Activation Device, please see instructions that accompany that product.

- **FILTER LIFE INDICATOR**
  (Membrane Control Panel)

The filter life indicator on the membrane control panel provides a visual indication of the status of the life of the filter in use. The filter life indicator for the ClearView™ Smoke Evacuation System will automatically adjust according to the flow setting selected.

Low/Lap Flow Setting = 35 hours of filter life Medium Flow Setting = 24 hours of filter life High/Turbo Flow Setting = 18 hours of filter life

The ClearView™ Filter Life Indicator is factory set. All filter life timing is automatic.

Reading the Filter Life Indicator:

Install an unused ClearView™ Filter into the system per the installation instructions contained in this operator's manual. When the system is turned on, the filter life indicator with light up the leftmost GREEN LED, indicating 100% filter life. The indicator will progress thru subsequent GREEN LEDs, to an AMBER LED as time elapses and begin flashing RED to indicate that the filter has expended its useful life and requires replacement.

When the maximum filter life is consumed and the smoke evacuator is not powered off for greater than six (6) hours or the main power is disconnected – a new filter is required to activate the smoke evacuator and make operational.

- **FUSES**
  (circuit board)

Two 10 AMP fuses (8 AMP for 220/240 ClearView™ Smoke Evacuation Systems) are located on the circuit board within the housing of the system. It electrically protects both the system and the operator from damage or injury. If the system is overheated or if there is an electrical surge in the electrical system, fuses will break and the system will not operate.

When the Service light illuminates, please contact CONMED Customer Service for system service instructions.

2.2 Filter Instructions

CONMED P/N:	**60-8585-120 and 60-8585-230**
Configuration:	**Portable or tabletop**
Filter - Multi Port Filter:	**4-Stage Filtration in One Casing, (Pre-Filter, ULPA, Carbon, Post-Filter)**
Filter(s):	**ULPA**
Particle Size, mm:	**0.1 to 0.2 Microns at 99.999% Efficiency**
Filter Life:	**Automatic Factory Set Filter Sensor**
Filter Life Indicator:	**Time Replacement**
Filter P/N:	**60-8590-001**

Note: Before installing or removing any filter, be sure that the system is turned off.

Filter Installation Instructions:

The installation of the Filter into the CONMED ClearView™ Smoke Evacuation System(s) is quick and simple.

1. Remove the Filter from the shipping box and discard any protective wrapping. Examine all filters for damage during shipping and storage. Do not install any filter with visible signs of structural damage.
2. Insert the Filter into the filter receptacle. Be sure that the filter is seated completely against the bottom of the filter chamber and clip is fully engaged.

WARNING: This device is not intended for evacuation of fluid. If fluid is expected to be aspirated using the Filter or the CONMED ClearView™ Smoke Evacuation System, fluid collection devices must be installed with the vacuum hose assembly. Failure to install a fluid collection device may cause filter blockage and/or electrical damage.

Filter Removal Instructions:

1. After the Filter has been exhausted and requires changing, turn the smoke evacuation system off and disconnect any accessory tubing attached to the filter.
2. Depress the filter tab and pull the Filter from the smoke evacuation system and dispose of in accordance with hospital policy. The Filter may be disposed of or incinerated.
3. Clean the unit with appropriate germicide prior to re-use. Follow the indicated instructions for maintenance and installation of a new Filter.

CAUTION: Using any other filter or accessory not supplied by CONMED may cause damage to the system and/or cause the system to be inoperable and may void the warranty.

WARNING: The Filter should be changed when the Filter Life Indicator shows red flashing LED (replace). Failure to change this filter may result in decreased efficiency and contamination of the electric motor, vacuum pump, and sound absorbing media within the system, or non-operation of smoke evacuator.

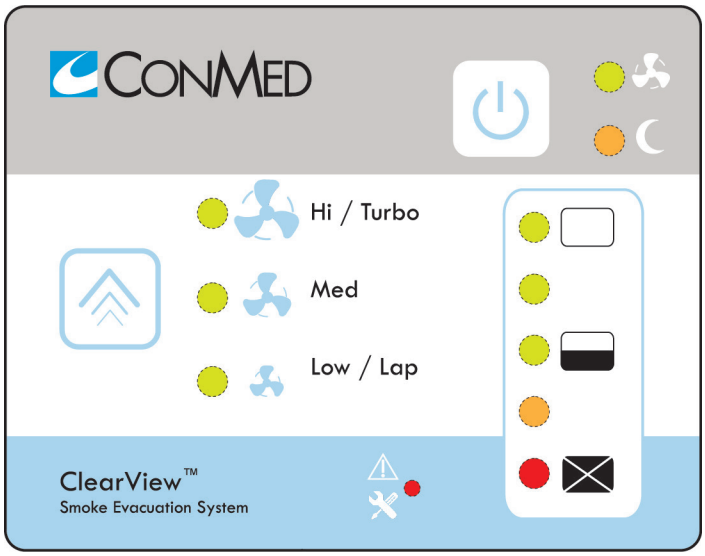

Figure 1
Unit Control Panel

2.4 Performance References*

Performance		
Model Number		60-8585-120 and 60-8585-230
Maximum Flow Setting (CFM-U.S.)		
Standard Hose I.D.		
	7/8”	25 CFM **
	3/8”	4.5 CFM
	1/4”	2 CFM
Standard Hose I.D.		
	22 mm	708 LPM **
	9.5 mm	130 LPM
	6.4 mm	57 LPM
Dimensions (H x W x D)	inches	6 x 11 x 15.5
Dimensions (H x W x D)	centimeters	15.2 x 27.9 x 39.4
Weight	lbs	4.3
Noise Level, dBA	(nominal) ≤	55.0 dBA
Footswitch Pneumatic		Standard
Automatic Control Activation		YES (optional)
Safety Features		UL Classified
		Fuse protection
Display		LED
		Filter Status
		Flow Rate
		Service Required
Voltage Available		100/120 VAC, 220/240 VAC
Frequency, auto sensed		50/60 Hz
Variable Flow Control		Yes
Motor	Watts	1000 ± 10%
Motor Static Suction	kPa (6.5 mm orifice)	21.04

*For reference purposes only
**Using a new 7/8 in tubing.

2.5 Electromagnetic Compatibility Information per IEC60601-1-2

Table 1

Guidance and Manufacturer's Declaration - Electromagnetic Emissions		
The Smoke Evacuation System model ClearView™ is intended for use in the electromagnetic environment specified below. The customer or user of the ClearView™ should assure that it is used in such an environment.		
Emissions Test	**Compliance**	**Electromagnetic Environment - Guidance**
RF Emissions CISPR 11	Group 1	The ClearView™ uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF Emissions CISPR 11	Class A	The model ClearView™ is suitable for use in all establishments, other than domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic Emissions IEC 61000-3-2	Class A	Not applicable.

Table 2

Guidance and Manufacturer's Declaration - Electromagnetic Immunity			
The model ClearView™ is intended for use in the electromagnetic environment specified below. The customer or user of the model ClearView™ should assure that it is used in such an environment.			
Immunity Test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environment Guidance**
Electromagnetic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/ output lines	±2 kV for power supply lines ±1 kV for input/ output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV differential mode ±2 kV common mode	±1 kV differential mode ±2 kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions, and voltage variations on power supply input lines. IEC 61000-4-11	<5 % U_T (>95 % dip in U_T) for 0.5 cycle 40 % U_T (60 % dip in U_T) for 5 cycles 70 % U_T (30 % dip in U_T) for 25 cycles <5 % U_T (>95 % dip in U_T) for 5 sec	<5 % U_T (>95 % dip in U_T) for 0.5 cycle 40 % U_T (60 % dip in U_T) for 5 cycles 70 % U_T (30 % dip in U_T) for 25 cycles <5 % U_T (>95 % dip in U_T) for 5 sec	Mains power quality should be that of a typical commercial or hospital environment. If the user of the Model ClearView™ requires continued operation during power mains interruptions, it is recommended that the Model ClearView™ be powered from an uniterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

Table 3

Guidance and Manufacturer's Declaration - Electromagnetic Emissions			
The model ClearView™ is intended for use in the electromagnetic environment specified below. The customer or user of the model ClearView™ should assure that it is used in such an environment.			
Immunity Test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environment - Guidance**
			Portable and mobile RF communications equipment should be used no closer to any part of the Model EVL including cables, than the Recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
Radiated RF	3 V/m		d = 1.7 $\sqrt{P}$ 80 MHz to 800 MHz
IEC 61000-4-3	80 MHz to 2.5 GHz	3 V/m	d = 2.3 $\sqrt{P}$ 800 MHz to 2.5 GHz
		3 Vrms	d = [3.5/V1} $\sqrt{P}$
Conducted RF IEC 61000-4-6	150 kHz to 80 MHz		Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters m).
			Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, should be less than the compliance level in each frequency range.
			Interference may occur in the vicinity of equipment marked with the following symbol: 
NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies.			
NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structure, objects and people.			
Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the Model is used exceeds the applicable RF compliance level above, the model ClearView™ should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the model ClearView™. Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.			

Table 4

Recommended Separation Distance Between Portable and Mobile RF Communications Equipment and the Model @ 3 Vrms			
The model ClearView™ is intended for use in the electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the model ClearView™ can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the model ClearView™ as recommended below, according to the maximum output power of the communications equipment.			
Rated maximum output power of transmitter W	**Separation distance according to frequency of transmitter m**		
	150 kHz to 80 MHz $d = \left[\frac{3.5}{v_1}\right] \sqrt{P}$	80 kHz to 800 MHz $d = \left[\frac{3.5}{v_1}\right] \sqrt{P}$	800 kHz to 2.5 GHz $d = \left[\frac{3.5}{v_1}\right] \sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.34	0.34	0.74
1	1.7	1.7	2.3
10	3.7	3.7	7.4
100	11.7	11.7	23.3
For transmitters rated at a maximum output power not listed above, the recommended separation distance (D) in meters (M) can be estimated using the equation applicable to the frequency of the transmitter, where (P) is the maximum output rating of the transmitter in watts (W) according to the transmitter manufacturer.			
NOTE 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.			
NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structure, objects, and people.			

Maintenance
Section 3.0

3.1 General Maintenance Information

This section contains information for ordinary upkeep of the CONMED ClearView™ Smoke Evacuation System. While the system has been designed and manufactured to high industry standards, it is recommended that periodic inspection and performance testing be performed by a qualified Biomedical Technician to ensure continued safe and effective operation.

3.2 Cleaning

Unplug Unit. Wipe unit with a damp cloth containing mild disinfectant solution or soapy water. Wipe dry with a clean cloth. Do not steam sterilize.

3.3 Periodic Inspection

The ClearView™ Smoke Evacuation System should be visually inspected at least every year. This inspection should include checks for:

- Damage to the power cord.
- Damage to the power plug or power inlet module.
- Proper mating, cleanliness and absence of damage to the filter inlet.
- Obvious external or internal damage to the system.

3.4 Troubleshooting the System – see below.

PROBLEM	POTENTIAL CAUSE	CORRECTIVE ACTION
1. Smoke Evacuation System is ON but suction is minimal or none.	1. Filter is not seated completely. 2. Filter is clogged. 3. Vacuum hose or tube is clogged. 4. Motor/blower is obstructed.	1. Re-install Filter, press firmly into place and fully engage clip. 2. Replace filter with a genuine CONMED Filter. 3. Replace vacuum hose or tube with genuine CONMED products. 4. Call BioMed or CONMED Customer Service at 1.800.448.6506 or +1.315.797.8375.
2. Smoke Evacuation System does not function even though suction ON button is depressed.	1. Not plugged into an electrical outlet. 2. Fuses are blown. 3. Electronic system failure. 4. Filter life has expired or invalid filter inserted.	1. Check power outlet and connection to rear or side panel of the machine. 2./3. Call BioMed or CONMED Customer Service at 1.800.448.6506 or +1.315.797.8375. 4. Replace filter with a genuine CONMED Filter.

Customer Service
Section 4.0

4.1 Equipment Return

For the quickest response to your service needs, please follow these procedures:

Step 1: Write down model and the serial number of the ClearView™ Smoke Evacuation System.

Step 2: Call Customer Service at the toll free or local number listed and describe the problem.

Step 3: If the problem cannot be resolved over the phone and the equipment must be returned for repair, you must obtain a "Return Material Authorization" (RMA) number from Customer Service before returning the system.

Step 4: If you have the original packing for your ClearView™ Smoke Evacuation System, use it to properly return your unit. If you do not have the original packing material, ask Customer Service for advice on how to pack the unit for return shipment.

Step 5: Freight for all returned goods should be prepaid by the shipper. Address will be supplied by Customer Service.

4.2 Ordering Information

To reorder, obtain replacement parts or to return a unit for service, call Customer Service at:

(800) 448-6506 (United States)
OR
+1 (315) 797-8375 (International)

or contact your authorized CONMED Distributor/Representative.

CONMED ClearView™ Smoke Evacuation System versions available:
- 100/120 VAC 50/60 Hz
- 220/240 VAC 50/60 Hz

Available accessories:
- Filters
- Automatic Activation Device
- Fluid Trap
- Hoses & Tubing
- Reducer Fittings
- Electrosurgical Pencil Adapters
- Electrosurgical Smoke Plume Pencils

Terms & Warranty
Section 5.0

SPECIFICATIONS:

Specifications are subject to change without notice.

SHIPMENT OF ORDER:

CONMED will try to accommodate individual customer requests for shipping method. CONMED reserves the right to decide shipping method on prepaid orders. Care is exercised in the checking and packaging of all merchandise to avoid error, but should discrepancies arise, claims should be made within 24 hours after delivery. CONMED's responsibility ceases with the safe delivery to the carrier at our dock. If the merchandise is damaged in transit, a claim must be made to the carrier involved. CONMED will assist customers in pursuing these claims.

RETURN OF MATERIAL:

Return merchandise must have a pre-authorized return number from CONMED and be marked with this number prior to returning. Transportation costs must be prepaid by the shipper and all risks of loss and damage of goods are the responsibility of the shipper. Unauthorized returns will be refused. Include a copy of the packing papers and/or invoice with the return. Exchange will be of an equivalent dollar value of returned merchandise less a restocking and handling fee on new, unused, unopened equipment or disposables.

EXCEPTIONS:

1. Defective merchandise may be returned for replacement only. Please contact CONMED's Customer Service before shipping back merchandise.
2. Incorrectly shipped merchandise is exempt from restocking fees. Please contact CONMED's Customer Service before shipping back merchandise.

WARRANTY*:

CONMED warrants that the filter system shall be free from defects in material and workmanship. Products are warranted only to the extent that CONMED will replace without charge any filter systems proved to have defects within one (1) year of the date of delivery for P/N 60-8585-120 & 60-8585-230 and provided CONMED has been given the opportunity to inspect the system alleged to be defective and the installation or use thereof. No warranty is included for incidental or consequential damages of any nature arising from any defect. The warranty above is the only warranty made by CONMED and is expressly in lieu of all other warranties, expressed or implied, including, without limitation, the warranties of merchantability and fitness for a particular purpose. All warranties implied by any course of dealing or usage between parties are expressly excluded.

CONFIDENTIAL INFORMATION:

The information, drawings, plans, and specifications being furnished by CONMED have been developed at CONMED's expense and shall not be used or disclosed by purchaser for any purpose other than to install, operate, and maintain the system supplied.

CONSEQUENTIAL DAMAGES/LIMITS OF LIABILITY:

CONMED shall not in any case whatsoever be liable for special, incidental, indirect or consequential damages of any kind. In no case shall CONMED's liability exceed the amount paid CONMED by purchaser for the specific system giving rise to the liability. Purchaser agrees to indemnify and hold CONMED harmless from and against all liabilities, claims, and demands of third parties of any kind relating to the system and its use.

ENTIRE AGREEMENT:

Purchaser by acceptance of CONMED's offer does acknowledge and agree to the terms and conditions contained herein. All matters involving the validity, interpretation and application of this agreement shall be controlled by the laws of the State of New York. Using any filter not offered by CONMED may cause damage to the systems and will be cause for voiding the warranty.

JURISDICTION:

Purchaser hereby consents to the jurisdiction of the New York Courts with respect to any controversy or dispute arising out of this agreement or the merchandise sold hereunder.

Distributed by:

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