

Problem  
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# PresSsion<sup>®</sup>

## Gradient Sequential Compression Units

User Manual  
for Models:

**Multi 3**  
(4331-110V)  
(4332-220V)

**Multi 6**  
(4333-110V)  
(4334-220V)



ISO 13485 CERTIFIED



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PresSsion® Gradient Sequential - Multi 3 & Multi 6

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# FOREWORD

PresSsion® Gradient Sequential - Multi 3 & Multi 6

This manual has been written for the owners and operators of the Multi 3 and Multi 6 PresSsion® Gradient Sequential units. It contains general instructions on operation, precautionary practices, maintenance and parts information. In order to maximize use, efficiency and the life of your unit, please read this manual thoroughly and become familiar with the controls as well as the accessories before operating the units.

Specifications put forth in this manual were in effect at the time of publication. However, owing to Chattanooga Group's policy of continual improvement, changes to these specifications may be made at any time without obligation on the part of Chattanooga Group.

The use of these pumps have been recommended by your physician or medical provider. The proper pump settings and usage time will be recommended to you. Do not change these settings or other treatment guidelines unless instructed to do so. The use of this pump and garment should be comfortable and easy for you.

The system has three parts: the pump, hoses, and an inflatable garment. The pump sends air through either three or six hoses (depending on the model). Using the additional air hose connection, the pump may be connected to two garments simultaneously. On the garments, the chambers fill, one at a time, starting from the end farthest from the body. There may be a time when it feels like all the sections are full and the pressure is holding. This is normal and helps to move blood and extra fluid toward the heart.

During the compression treatment, your limb should be elevated. You may sit, recline, or lie down during treatment. Other instructions may be given to you by your medical provider.

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# ABOUT COMPRESSION THERAPY

PresSsion® Gradient Sequential - Multi 3 & Multi 6

## PRECAUTIONARY INSTRUCTIONS

The precautionary instructions found in this section and throughout this manual are indicated by specific symbols. Understand these symbols and their definitions before operating this equipment. The definition of these symbols are as follows:



**=CAUTION-**

Text with a "CAUTION" indicator explains possible safety infractions that have the potential to cause minor to moderate injury or damage to equipment.



**=WARNING-**

Text with a "WARNING" indicator explains possible safety infractions that potentially cause serious injury and equipment damage.



**=DANGER-**

Text with a "DANGER" indicator explains possible safety infractions imminently hazardous situations that result in death or serious injury.



**=EXPLOSION HAZARD-**

Text with an "Explosion Hazard" indicator explains possible safety infractions if this equipment is used in the presence of flammable anesthetics.

**NOTE:** Throughout this manual, "NOTE" may be found. These notes are helpful information to aid in the particular area or function being described.



## CAUTION

- Read, understand, and practice the precautionary and operating instructions. Know the limitations and hazards associated with using any electrical device. Observe the precautionary and operational decals placed on the units.
- Use these units only with accessories specifically designed and manufactured by Chattanooga Group. Not adhering to this guideline may cause damage to the units, malfunction, electrical shock, fire, or personal injury.
- These units should be operated, transported and stored in temperatures between 59° and 86° F (15° C and 30° C), with relative humidity ranging from 0-50%.
- The units should be routinely checked before each use to determine all controls function normally.
- Handle units with care. Inappropriate handling of the units may adversely affect their characteristics.
- DO NOT remove the covers. This may cause unit damage, malfunction, electrical shock, fire, or personal injury. There are no user-serviceable parts inside the units. If a malfunction occurs, discontinue use immediately, disconnect the Power Supply Cord from the outlet, and consult the dealer for repair service.

## CAUTION

- DO NOT permit any foreign materials or liquids to enter the units. Take care to prevent any foreign materials including, but not limited to, inflammables, water, and metallic objects from entering the units. These may cause unit damage, malfunction, electrical shock, fire, or personal injury.
- DO NOT disassemble, modify, or remodel the units or accessories. This may cause unit damage, malfunction, electrical shock, fire, or personal injury.
- DO NOT use the units near devices such as X-ray units or diathermy units. These units may emit high frequency noise that may affect the operation of the unit.
- If you have difficulty operating the units after carefully reviewing this user manual, contact your Chattanooga Group dealer for assistance.
- Failure to use and maintain the units and their accessories in accordance with the instructions outlined in this manual will invalidate your warranty.
- Always place the units on a flat, stable surface before operation. The units will not operate properly if tilted or at an angle.

## WARNING

- Use of controls or adjustments or performance of procedures other than those specified herein may result in injury.
- Before connecting the units to an electrical outlet, make certain the units are electrically grounded by connecting only to a grounded electrical service receptacle conforming to the applicable national and local electrical codes.
- DO NOT use a damaged Power Supply Cord. Using a damaged Power Supply Cord may cause unit damage, malfunction, electrical shock, fire, or personal injury. If the Power Supply Cord becomes damaged, discontinue use immediately and contact the dealer for replacement of the Power Supply Cord.
- These devices should be kept out of the reach of children.
- Care must be taken when operating this equipment around other equipment. Potential electromagnetic or other interference could occur to this or to the other equipment. Try to minimize this interference by not using other equipment in conjunction with it.
- This equipment is for use only by or under the direction of qualified medical personnel.
- Federal law restricts this device to sale by, or on the order of, a physician or a licensed practitioner.
- Dispose of all products in accordance with local and national regulations and codes.
- Garments are to be used on limbs ONLY. DO NOT use in a manner to impair breathing.

# ABOUT COMPRESSION THERAPY

PresSsion® Gradient Sequential - Multi 3 & Multi 6

## **WARNING**

- Deflate garments before removing. Failure to do so will result in damage to the garments.
- DO NOT operate these units when connected to any unit other than Chattanooga Group devices.
- Unplug unit before cleaning.
- Do not cover unit while it is in operation.

## **DANGER**

- DO NOT connect the units to an electrical supply without first verifying that the power supply is the correct voltage. Incorrect voltage may cause unit damage, malfunction, electrical shock, fire, or personal injury. The units were constructed to operate only on the electrical voltage specified on the Voltage Rating and Serial Number Plate. Contact your Chattanooga Group dealer if the unit is not properly rated.

### **Indications**

Compression therapy is indicated for the following:

- Treatment of disorders associated with vascular or lymphatic insufficiency such as Chronic Venous Insufficiency (CVI), venous stasis ulcers, post-mastectomy edema and chronic lymphedema.
- Reduction of edema associated with soft tissue injuries such as burns, postoperative edema, and ligament sprains.
- Decrease risk of Deep Vein Thrombosis (DVT).

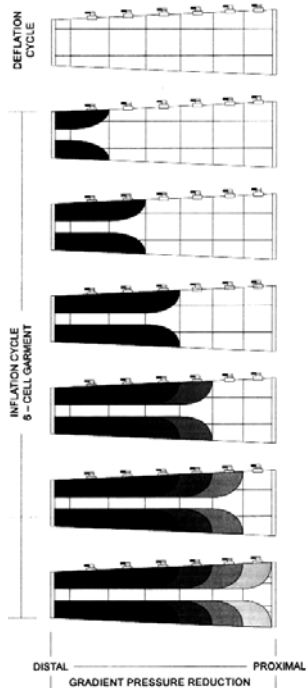
### **Contraindications**



Compression therapy is contraindicated for the following:

- Acute thrombophlebitis.
- Suspected or recent deep vein thrombosis.
- Acute pulmonary edema.
- Congestive heart failure.

# SPECIFICATIONS

PresSsion® Gradient Sequential - Multi 3 & Multi 6



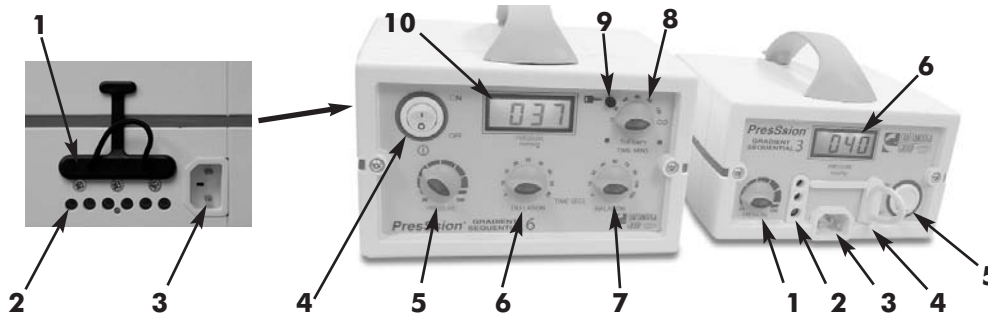
Specification	Multi 3	Multi 6
Power Source & Frequency	110-120 VAC, 60 Hz (Model 4331) 220-250 VAC, 50 Hz (Model 4332)	110-120 VAC, 60 Hz (Model 4333) 220-250 VAC, 60 Hz (Model 4334)
Fuse	T 0.5 Amps	T 0.5 Amps
Electrical Type	BF 	BF 
Electrical Class	Class I (Earthed)	Class I (Earthed)
Power Consumption	20 W	20 W
Pressure	30-100 mmHg ± 5mmHg	30-100 mmHg ± 5mmHg
Inflation Time	Cycles of 35 seconds	Adjustable Cycles 5-120 seconds
Deflation Time	Cycles of 10 seconds	Adjustable Cycles 5-60 seconds
Treatment Time	User Controlled	15 minutes to Continuous
Number of Pressure Lines	2 x 3	2 x 6
Height*	5.3 in (13.5 cm)	5.5 in (14 cm)
Width*	6.6 in (16.8 cm)	7.5 in (19.1 cm)
Depth*	5.9 in (15 cm)	5.9 in (15 cm)
Standard Weight	4.10 lbs (1.86 kg)	4.70 lbs (2.14 kg)

\*All measurements are intended for reference only. The unit's dimensions may vary based on the accuracy of measurement.

The PresSsion units inflate successive chambers from distal to proximal during the inflation time. All chambers are deflated simultaneously.

# NOMENCLATURE

PresSaion® Gradient Sequential - Multi 3 & Multi 6



1. *Blanking Plug* - Remove this plug in order to inflate or deflate a second garment. Keep this plug inserted when inflating or deflating only one garment.
2. *Air Supply Connections* - Point of attachment for air hoses.
3. *Power Supply Cord Receptacle* - Location of Power Input from Power Supply Cord.
4. *Power Switch* - ON/OFF toggle switch.
5. *Pressure Regulator Dial* - Sets pressure.
6. *Deflation Time Control Dial* - Sets the time during which the garment is deflated, plus the rest of the interval before the next cycle.
7. *Inflation Time Control Dial* - Sets the time during which the garments chambers will be sequentially pressurized. Includes inflation time and time held at selected pressure.
8. *Therapy Timer Control Dial* - Sets the time for the actual compression treatment time.
9. *Start Button* - Begins compression treatment.
10. *LCD Pressure Display* - Displays the pressure in the garment at all times.

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6. *LCD Pressure Display* - Displays the pressure in the garment at all times.

# OPERATION

PresSsion® Gradient Sequential - Multi 3 & Multi 6



1. Place the unit on a firm and level surface.
2. Plug the power cord (female end) into the power cord receptacle. This is located on the left side of Multi 6, and on the front of the Multi 3.
3. Plug the other end of the power cord (male end) into a grounded, electrical outlet.

**NOTE:** The pump operates best at room temperature. If the unit has been stored below normal temperature, allow it to warm to room temperature for proper operation.



4. Connect the air supply hose to the air supply connection. The connection is located on the left side of the Multi 6, and on the front of the Multi 3.
5. When using only one garment, seal the upper row of holes (3 on the front of the Multi 3, and 6 on the left side of the Multi 6) with the blanking plug provided.



6. Connect the air supply hoses into the fittings on the garment.

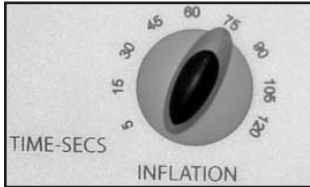
# OPERATION

PresSsion® Gradient Sequential - Multi 3 & Multi 6



7. Place the patient's limb into the garment and close the garment with the zipper. The full leg or full arm garment should be worn as high up to the groin or armpit as possible, avoiding bunching or wrinkling of the garment in these areas. Any extra length at the foot or hand will fill with air and compress properly.

**NOTE:** For comfort, it is recommended that an absorbent stocking, sleeve, or tubular bandage be worn beneath the garment.



8. Use the Inflation Time Control dial to select the prescribed inflation time (on the Multi 6 model).

**NOTE:** Inflation time includes the time to inflate garment plus the time held at the selected pressure.



9. Use the Deflation Time Control dial to select the prescribed deflation times (on the Multi 6 model). The deflation time includes the time to deflate garment plus the rest interval before the next cycle.

**NOTE:** The Multi 3 model has a preset inflation and deflation time.



10. Using the Pressure Regulator dial, **select the pressure setting as prescribed by your health care provider.**

# OPERATION



11. Using the Therapy Timer Control dial (on the Multi 6 model), set the prescribed time that the patient is to receive compression therapy.



12. Press the Power Switch to the ON position. This starts compression therapy on the Multi 3 model.  
On the front of the Multi 6, the buzzer will sound. You must press the Start button to begin therapy.

**NOTE:** Each chamber of the multi-chamber garment will inflate in sequence starting with the distal (furthest from the body) and continuing up the limb.

All chambers will deflate simultaneously and remain deflated for the duration of the inflation cycle.



13. On the Multi 3 model, note the time the treatment begins so that you can power off the unit when the desired treatment time has elapsed.
14. Use the Pressure Regulator dial to adjust the pressure during treatment, if necessary.

# OPERATION

PresSsion® Gradient Sequential - Multi 3 & Multi 6



15. When the treatment is completed (the buzzer will sound, the pressure display light will turn off, and the garment will automatically deflate on the Multi 6 model), press the Power Switch to the OFF position. This will automatically deflate the garment.

**NOTE:** Leave the pressure control at its position to use the same pressure for the next treatment. Successive treatments can be given by simply turning the Power Switch to the ON position (on the Multi 3 model).

## CAUTION

**DO NOT** unzip the garment when the unit is turned on. This may cause damage to the garment. Always press the Power Switch to the OFF position when unzipping the garment.

Avoid applying any weight onto the hoses, as it may restrict air flow.

# TROUBLESHOOTING & MAINTENANCE

PresSsion® Gradient Sequential - Multi 3 & Multi 6

## CAUTION

Electrical shock hazard. Removal of cover and servicing of internal components must be done by qualified service personnel. Unplug the unit before attempting to troubleshoot.

Problem	Possible Cause	Possible Solution
Will not operate.	Unit not properly plugged in.	Check plug. Insert firmly into receptacle.
	Improper voltage.	Check nameplate for proper operating voltage.
		Return to dealer.
Pump operates, but garments will not inflate	Hose connector is not fully inserted.	Check connections at garment & unit. Remove & reinsert if necessary.
	Inflation cycle is too short.	Adjust inflation control dial counterclockwise.
	Insufficient pressure.	Adjust pressure control dial clockwise.
	Defective garment.	Check for air leaks & replace if necessary.
Garment too tight.	Garment not properly positioned.	Switch power off. Deflate garment & reposition.
	Pressure setting too high.	Check pressure setting. Make sure it corresponds to the setting recommended by medical personnel. Reduce pressure if necessary.

## WARNING

- Remove the Power Supply Cord from the unit before cleaning.
- DO NOT dry clean or steam sterilize.
- DO NOT wring, iron or tumble dry garments.
- DO NOT clean with harsh detergent, solvents, chemicals or any harsh cleaning agent.

1. Store pump & garments in a safe dry place. Hoses should be rolled up to avoid kinking.
2. Avoid contacting garment and hoses with sharp or rough edges that may damage or puncture.
3. To clean pump and hoses, wipe with a damp cloth.
4. Before cleaning, detach air hoses from garment. Push attached sealing plugs firmly into hose fittings. **TURN GARMENTS INSIDE-OUT AND CLOSE ZIPPER BEFORE MACHINE WASHING.**
5. Gently hand or machine wash using only mild detergent or soap powder in warm water not exceeding 125° F (51° C).
6. Spin or drip dry only.
7. To sterilize, use gas system with temperatures not exceeding 125° F (51° C).

# ACCESSORIES

PresSsion® Gradient Sequential - Multi 3 & Multi 6



## Uniform Garments (for use with the Multi 3 only)

- 43013-Half Arm-17 in (43 cm)
- 43014-Full Arm-29 in (74 cm)
- 43016-Foot and Ankle-10 in (25 cm)
- 43017-Half Leg-20 in (51 cm)
- 43018-3/4 Leg-26 in (66 cm)
- 43019-Full Leg-29 in (74 cm)
- 43020-Full Leg-32 in (81 cm)
- 43021-Full Leg-35 in (89 cm)
- 43023-Full Leg-Wide-35 in (89 cm)



## Sequential Garments

- 43032-Full Leg 6 Chambers-32 in (81 cm)
- 43034-Half Arm 3 Chambers-17 in (43 cm)
- 43035-Full Arm 6 Chambers-30 in (76 cm)
- 43036-Half Leg 3 Chambers-20 in (51 cm)
- 43092-Full Leg 3 Chambers-32 in (81 cm)
- 43093-Full Arm 3 Chambers-29 in (74 cm)
- 43149-3/4 Leg 6 Chambers-26 in (66 cm)
- 43194-3/4 Leg 3 Chambers-26 in (66 cm)

## Replacement Hose Sets

- 43096-Hose Set Multi 3
- 43097-Hose Set Multi 6

## Inflatable Expanders

- 43127 - Full Arm 3/4 Leg 3 Chambers
- 43128 - Half Leg 3 Chambers
- 43129 - Full Leg 3 Chambers



# WARRANTY

## PresSsion® Gradient Sequential - Multi 3 & Multi 6

Chattanooga Group ("Company") warrants that the PresSsion units are free of defects in material and workmanship. This warranty shall remain in effect for one year (12 months) from the date of original consumer purchase. If this Product fails to function during the one year warranty period due to a defect in material or workmanship, Company or the selling dealer will repair or replace this Product without charge within a period of thirty (30) days from the date on which the Product is returned to the Company or the dealer.

All repairs to the Product must be performed by a service center certified by the Company. Any modifications or repairs performed by unauthorized centers or groups will void this warranty.

The warranty period for the accessories shipped with the 120 volt model is 90 days. The warranty period for the accessories shipped with the 220 volt model is 180 days. Accessories consist of the materials shipped with the unit.

To participate in warranty coverage, this Product's warranty registration card (included with Product) must be filled out and returned to the Company by the original owner within ten (10) business days of purchase.

This Warranty Does Not Cover:

Replacement parts or labor furnished by anyone other than the Company, the selling dealer or a certified Company service technician.

Defects or damage caused by labor furnished by someone other than Company, the selling dealer or a certified Company service technician.

Any malfunction or failure in the Product caused by product misuse, including, but not limited to, the failure to provide reasonable and necessary maintenance or any use that is inconsistent with the Product User's Manual.

### **COMPANY SHALL NOT BE LIABLE IN ANY EVENT FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

Some states and locations do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

To Obtain Service From Company or the selling dealer under this warranty:

1. A written claim must be made within the warranty period to the Company or the selling dealer. Written claims made to the Company should be sent to:

#### **USA**

Chattanooga Group  
4717 Adams Road  
P.O. Box 489  
Hixson, TN 37343 USA  
Telephone: (800) 592-7329  
Facsimile: (423) 875-5497  
www.chattgroup.com

#### **Outside USA**

Chattanooga Group  
4717 Adams Road  
P.O. Box 489  
Hixson, TN 37343 USA  
Telephone: +1 423 870 7200  
Facsimile: +1 423 870 2046  
www.chattgroup.com

and

2. The Product must be returned to the Company or the selling dealer by the owner.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state, and location to location.

The Company does not authorize any person or representative to create for it any other obligation or liability in connection with the sale of the Product. Any representation or agreement not contained in the warranty shall be void and of no effect.

**THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**







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