

ARJOHUNTLEIGH

## Flowtron<sup>®</sup> Universal



## User Manual

Intermittent Pneumatic Compression System



## Contents

<b>Description and Operating Principle</b> .....	<b>1</b>
<b>Clinical Applications</b> .....	<b>2</b>
<b>Cautions &amp; Contraindications</b> .....	<b>3</b>
Cautions.....	3
Contraindications.....	3
<b>System Set up</b> .....	<b>4</b>
Garment Application .....	4
General Guidelines and Recommendations .....	4
System Operation .....	5
To Use One Garment .....	7
To Use Different Garments on Each Limb.....	8
<b>Settings Adjustment</b> .....	<b>9</b>
<b>Troubleshooting</b> .....	<b>10</b>
<b>Options</b> .....	<b>11</b>
<b>Battery Operation</b> .....	<b>12</b>
Connecting the Battery Pack.....	12
Battery Pack in Use.....	13
Checking the Status of the Battery .....	14
Recharging the Battery Pack.....	15
Alternative Method of Charging.....	16
<b>Warranty and Service</b> .....	<b>17</b>
<b>Cleaning Instructions</b> .....	<b>19</b>
<b>Ordering Information</b> .....	<b>20</b>
<b>Technical Data</b> .....	<b>21</b>



## General Safety

Before you connect the system pump to a mains socket, read carefully all the installation instructions in Section 4 - System Set Up. The system has been designed to comply with regulatory safety standards including:

- UL60601-1 & CAN/CSA C22.2 No 601-1

### Safety Warnings

- **Electrical equipment may be hazardous if misused. The pump's case back should only be removed by authorised technical personnel.**
- **Do not use the pump in the presence of flammable gases such as anaesthetic agents.**
- **Make sure that the mains power cable is positioned to avoid causing a trip or other hazard, and is clear of moving bed mechanisms or other possible entrapment areas.**

### Caution

**Electromagnetic compatibility (EMC). This product complies with the requirements of applicable EMC Standards. The use of accessories not specified by the manufacturer may result in increased emissions by, or decreased immunity of, the equipment, affecting its performance**

## Precautions

For your own safety and the safety of the equipment, always take the following precautions:

- Regularly check the system when in use, for pump operation and garment fit.
- Keep the pump away from sources of liquids and do not immerse in water.
- Do not expose the system, especially the garments, to naked flames, such as cigarettes etc.
- Do not store the system in direct sunlight.
- Switch off the electrical supply to the pump by disconnecting the pump from the mains socket before cleaning and inspection.
- Do not use hypercarbonate or phenolic based cleaning solutions.
- Ensure the system is clean and dry prior to storage.
- Only the pump and garment combination as indicated by Huntleigh Healthcare should be used. The correct function of the product cannot be guaranteed if the incorrect pump/garment combinations are used.



---

## 1. Description and Operating Principle

---

The **Flowtron® Universal** system is a non-invasive external intermittent pneumatic compression system for reducing the incidence of Deep Vein Thrombosis (DVT).

The application of external pneumatic compression has two effects:

- Augments venous blood flow velocity, thereby reducing stasis.
- Enhances fibrinolytic activity to reduce the risk of early clot formation.

The system comprises of a pump that can be used in conjunction with an extensive range of Huntleigh Healthcare inflatable garments, including foot, calf and thigh length versions.

The system is designed to be simple and easy to operate.

The pump automatically adjusts to the correct therapy profile depending upon which garment type (foot, calf or thigh length) is connected.

An optional battery pack is available which allows the pump to be used independently of an AC power outlet.

### **Caution**

**Federal law restricts this device to sale by or on the order of a physician.**

---

## 2. Clinical Applications

---

The primary application of the **Flowtron Universal** system is for the prevention of Deep Vein Thrombosis. Depending on the garment type used, other clinical applications are also appropriate.

The FG foot garment, in particular, has a wide range of clinical applications.

Full details for clinical applications are included in the packaging of every garment.

**The type of garment used on an individual patient must be specified by a physician.**



---

### 3. Cautions & Contraindications

---

#### Cautions

1. Proper garment application and connection to the pump is essential.
2. Garments should be positioned in such a way that they do not create any potential for constant pressure points on the patient's limb. Additional care should be taken when placing the garments on any deformed leg or foot, or on legs with significant oedema.
3. Garments should be removed immediately if the patient experiences tingling, numbness, or pain, and the physician notified.
4. When used for DVT prevention, continuous external pneumatic compression is recommended until the patient is fully ambulatory. Uninterrupted use of the **Flowtron Universal** system is encouraged.
5. The Flowtron Universal system should be USED WITH CAUTION on patients with:
  - Insensitive extremities
  - Diabetes
  - Impaired circulation
  - Fragile or impaired skin

#### Contraindications

The **Flowtron Universal** system should NOT be used in the following conditions:

1. Where an increase of fluid to the heart may be detrimental.
2. Severe congestive cardiac failure.
3. Known or suspected acute deep vein thrombosis, thrombophlebitis or pulmonary embolism.
4. On untreated, infected legs.

---

## 4. System Set up

---

The **Flowtron Universal** system is simple to set up and operate. The pump does not require any setting or adjustment of controls. It automatically senses the type of garment connected and adjusts the therapy cycle accordingly.

### Garment Application

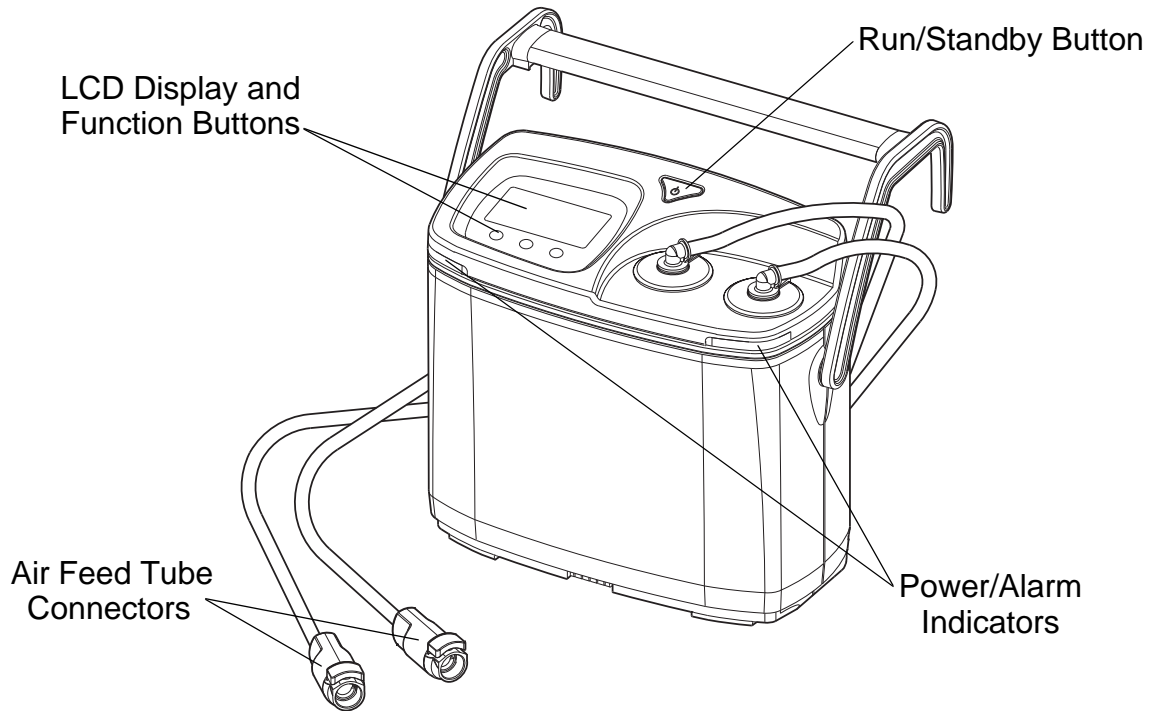
Use the correct garment type as ordered by the patient's physician.

For detailed instructions on correct fitting and use, carefully read and follow the instruction provided with every garment set.

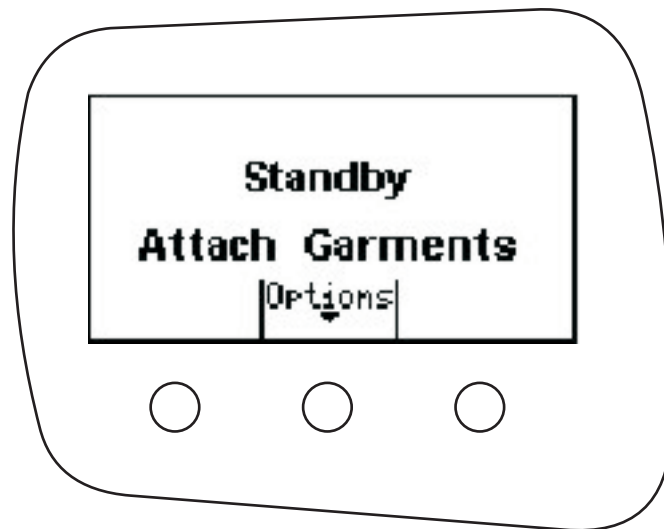
### General Guidelines and Recommendations

- Only use Huntleigh Healthcare approved garments with the **Flowtron Universal** system. Note: Non-Huntleigh garments will not function properly with the system and should not be used.
- While using the system, the patient's limbs should be checked during every shift, and more often if the patient has known circulatory or skin problems, or is diabetic.
- Note: Many patients are at risk for pressure ulcers on the heel. Use of the foot garments does not negate the necessity for heel protection and proper skin care.
- Clinical judgment should be used to determine if the patient's skin condition requires additional measures, such as use of a stockinette or padding, or if the treatment should be discontinued and alternative modalities used.
- Huntleigh Healthcare, however, does not recommend the use of compression stockings with its system. If these are ordered by the physician, the clinician should ensure that the compression stockings are properly measured, applied and worn by the patient. Any compression stocking used should be routinely checked to ensure continued proper fit and application, in addition to assessing the condition of the skin.

## System Operation



Plug the pump into an electrical outlet. The pump will first go through a self-test routine and then remain in **Standby** until required for use.





Apply the prescribed Huntleigh Healthcare garment to the patient by carefully following the instructions included in the garment packaging.

Connect the garments to the pump air tubing and ensure the connectors click into place.

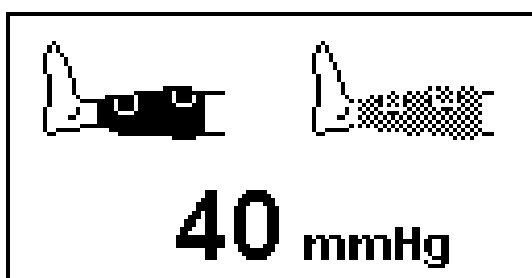
Check that the connection and garment type are confirmed correctly on the display.




**Typical garment options and therapy parameters**

Garment Type	Inflation Pressure (mmHg)	Inflation Hold (seconds)	Cycle (seconds)
 Foot garments e.g., FG100-200	130	3	30
 Single chamber garments e.g., DVT10-40,60	40	12½	60

TO START, press the green RUN  button on the pump. The green lights will illuminate and therapy will begin.



*(this example shows the pump running and the left garment inflated to 40 mmHg)*

 Refer to “Battery Operation” on page 13 when operating the pump under battery power.

TO STOP press the green RUN  button a second time. The green lights will go out and therapy will stop.

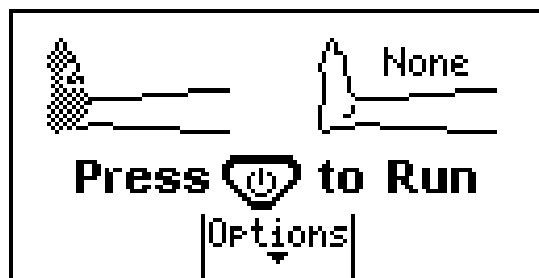
### **Recommended Checks:**




- Check display symbols to confirm that the correct type of garment has been connected.
- During garment inflation, check the display to confirm that the correct pressure is being applied and that there are no fault messages appearing.
- Check that there are no kinks in the tubing.
- Check that the hoses and connectors do not cause the patient any discomfort.
- Regularly check that the garments remain correctly fitted to the patient.

### **To Use One Garment**

When the pump is in standby (page 5 system operation) connect one garment to either tubing outlet.

The display will confirm that only one garment is connected.



 *If a garment is disconnected while the pump is running, the system will alarm **Lo**. If the single garment option is still required, simply press the RUN  button to reset the system and press RUN  again to restart therapy.*

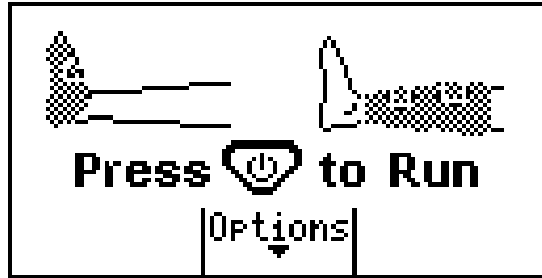
*If, at any time, a second garment is connected while the pump is running, the pump will automatically change to two garment operation.*

## To Use Different Garments on Each Limb

It is possible to use different garment types on each limb (if prescribed by the patient's physician).

Simply connect the garments to either tubing outlet and the correct therapy cycle will be administered.

Check on the display panel to confirm the garment types connected.



---

## **5. Settings Adjustment**

---

The pump is configured to give the recommended therapy for each garment type and does not require any setting by the clinician or nurse.

If the physician requires different therapy settings, limited changes can be made through a service link. Contact your local Huntleigh sales representative for details.

## 6. Troubleshooting


The **Flowtron Universal** pump features an audible and visual alarm. If a problem occurs, the system will sense the fault and briefly flash a message on the display.


If the same fault continues for 10 successive inflations (up to 10 minutes), the audible alarm will sound, the red alarm lights flash and a message will appear on the display until corrective action is completed. (The exception to this is an “F” fault, which will alarm immediately.)

Pump Display	Problem	Corrective Action
<b>Lo</b> Garment leak	Garment Leak	Check garment and replace if faulty.
<b>Lo</b> Garment disconnected	Garment disconnected	Check and reconnect.
<b>Lo</b> Garment loosened	Foot Garment has come off patient during use	Reapply foot garments to patient.
<b>HI</b> Tube kinked	Hose kinked causing a blocked tube	Check hoses for kinks and obstructions.
<b>F</b> Pump fault	Pump failure	Do not use pump, refer to service.

### **Alarm Cancel:**

After a fault has been corrected, the alarm can be cancelled by two methods:

Press the RUN  button twice, or until the green lights are lit and the pump is running.

 Refer to “Battery Operation” on page 13 when operating the pump under battery power.

With the exception of a pump failure ( **F** ), correct the fault and allow the pump to run until it senses a normal inflation; it will then reset itself.

### **Recommended Checks:**

To confirm that the fault has corrected, watch the display for approximately one minute. If the fault has not been corrected, a fault message will flash during that time.

In addition, the pump will refuse to start if it does not recognize the attached garment.

Pump Display	Problem	Corrective Action
“None” or “Standby Attach Garments”	Pump will not start due to no garments connected or a non-Huntleigh authorized garment connected.	Connect an authorized Huntleigh garment.



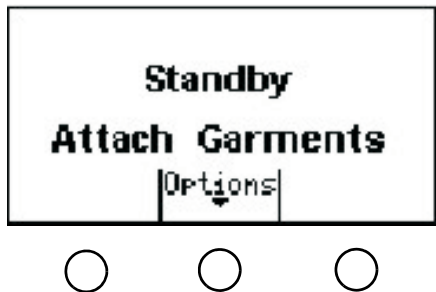
---

## 7. Options



---

Pressing the option button will bring up a multi-choice menu of options.



The option can be set using a combination of the three soft function buttons on the display.





### ***Audio Alarm Volume***

- Press the **Options** button,
- Use the arrow buttons   to select **Audio Alarm** volume.
- Press the **✓** button to display the volume setting controls.
- Use buttons to select either **high** or **low** volume setting.
- Press the **✓** button to confirm.
- The selected volume setting will remain in place during subsequent uses of the pump.

### ***Patient Hours Meter***

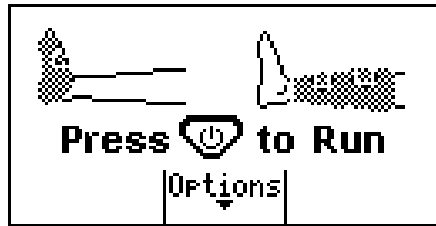
- Press the **Options** button,
- Use the arrow buttons   to select **Hours Run**.
- Press the **✓** button to display the total hours run.
- Press the **✓** button again; the pump will revert to its previous state.

### ***To Clear the Patient Hours Meter***

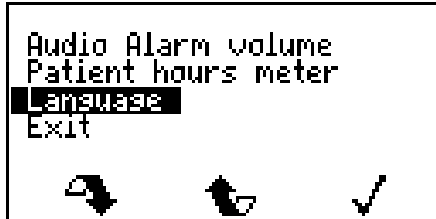
- Press the **Options** button.
- Use the arrow buttons   to select **Clear Hours**.
- Press the **✓** button to clear the hours to 0.
- Press the **✓** button again to confirm
- The hours meter has been cleared.

## To Change The Language Shown on The Pump

Press the function button adjacent to "Options".



Use the arrow buttons to highlight "Language".

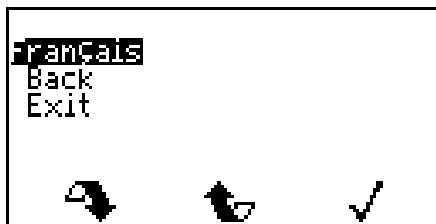


Press the ✓ button to confirm

Use the arrow buttons to scroll through the available languages.

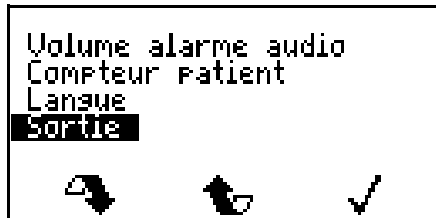
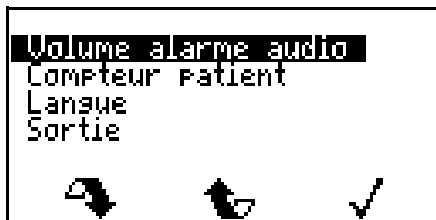


Press the ✓ button to confirm

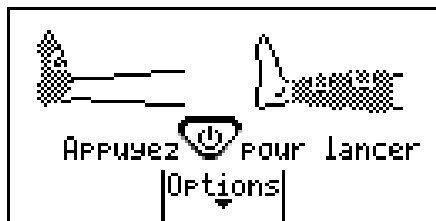


Press the ✓ button to confirm

Use the arrow buttons to highlight 'Exit'.



Press the ✓ button to confirm



---

## 8. Battery Operation

---

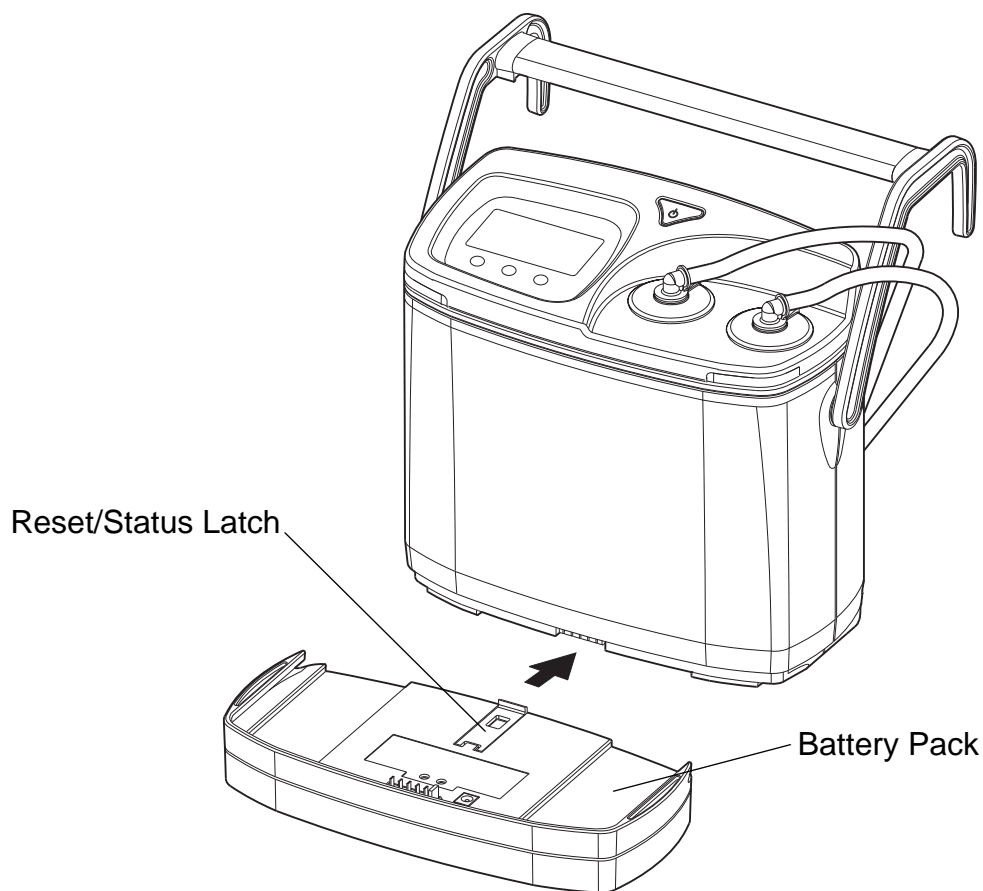
When used with the optional battery pack, the system can be run independently of AC power.

Typically, 6-8 hours of operation can be expected from a fully charged battery pack.

### Connecting the Battery Pack

From the front of the pump, engage the pack on the runners and slide into place until a click is heard.

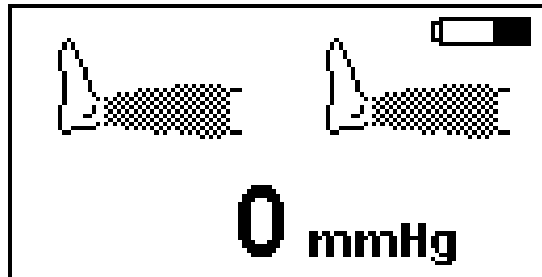
To remove the pack, depress the latch at the rear of the unit and slide pack forward and out.




## Battery Pack in Use

The battery pack will automatically take over powering the pump whenever the AC cord is removed from the wall outlet.

When running under battery power, a battery symbol appears in the top right hand corner of the display.



 *In order to maximize battery life, the power alarm indicators will not illuminate when operating the AC600 under battery power. You may verify therapy is, or is not, being provided via the LCD screen.*

The amount of charge remaining in the battery pack is indicated by the black block inside the battery symbol.



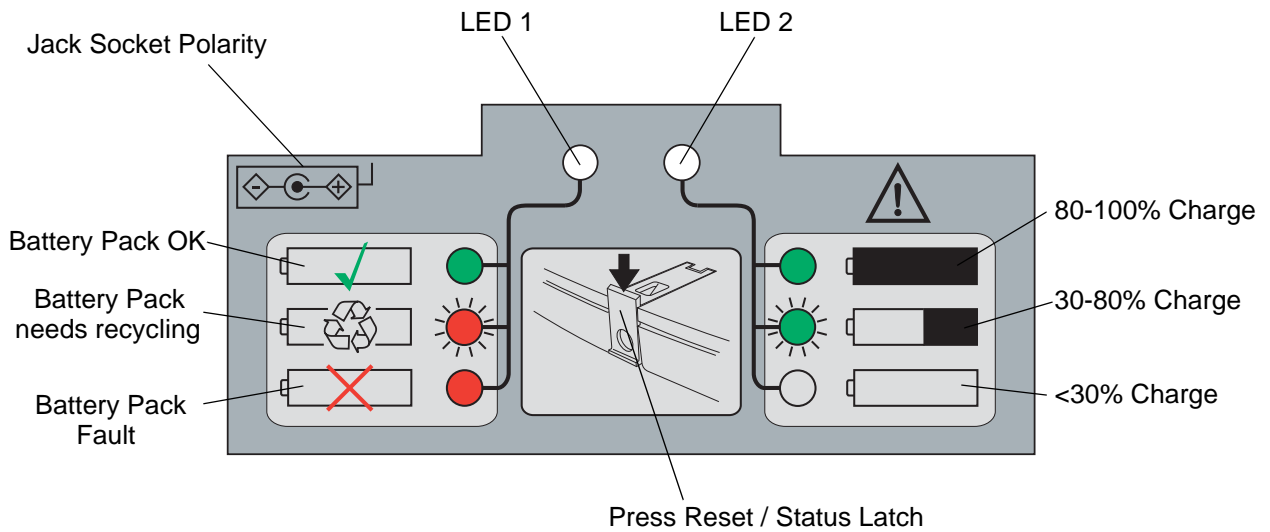
When the battery has only 5% of the charge remaining, the battery symbol will flash and the remaining charge will be displayed as a percentage. Recharge the battery as soon as possible.

Then, when the battery has 1% charge, the audible alarm will sound but the pump will continue to run. When the battery has no charge left the pump will shut down completely. Recharge the battery.

After use, disconnect the battery from the pump to maintain battery charge level. If the pump is put into standby mode it will beep after 10 minutes of inactivity, reminding you to either disconnect the battery or to plug the pump into an electrical outlet.

# Checking the Status of the Battery

## Battery Label













### To Check the Battery Status:

1. Remove the battery from the pump unit.
2. Press the Reset/Status Latch which will activate the 2 LEDs on the top of the battery.

If the battery pack is not on charge, the LEDs will display one of the following conditions:

LED 1	LED 2	Battery Status
Green ●	Green ●	The Battery Pack is OK. It has > 80% charge.
Green ●	Green ☀	The Battery Pack is OK. It has between 30-80% charge.
Green ●	○	The Battery Pack is OK. It has < 30% charge.
Red ☀	Green ☀	The Battery Pack needs recycling*. It has > 30% charge.
Red ☀	○	The Battery Pack needs recycling*. It has < 30% charge.
Red ●	○	The Battery Pack has a fault.
○	○	The Battery Pack has a fault.

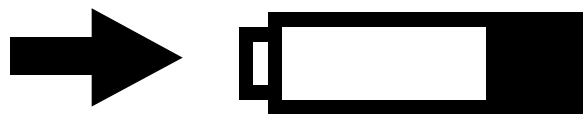
If the battery pack is on charge via the optional battery charger, the LEDs will display one of the following conditions:

LED 1	LED 2	Battery Status
Green 	Green 	The Battery Pack is OK. It is fully charged.
	Green 	The Battery Pack is charging.
Red 	Green 	The Battery Pack needs recycling*. The Battery is charging.
Red 		The Battery has a fault.
		The Battery has a fault.

\* Once the Battery Pack has entered the ‘recycling’ mode, it will never show that the battery is fully charged (Note: This does not indicate a fault condition).


### Recharging the Battery Pack

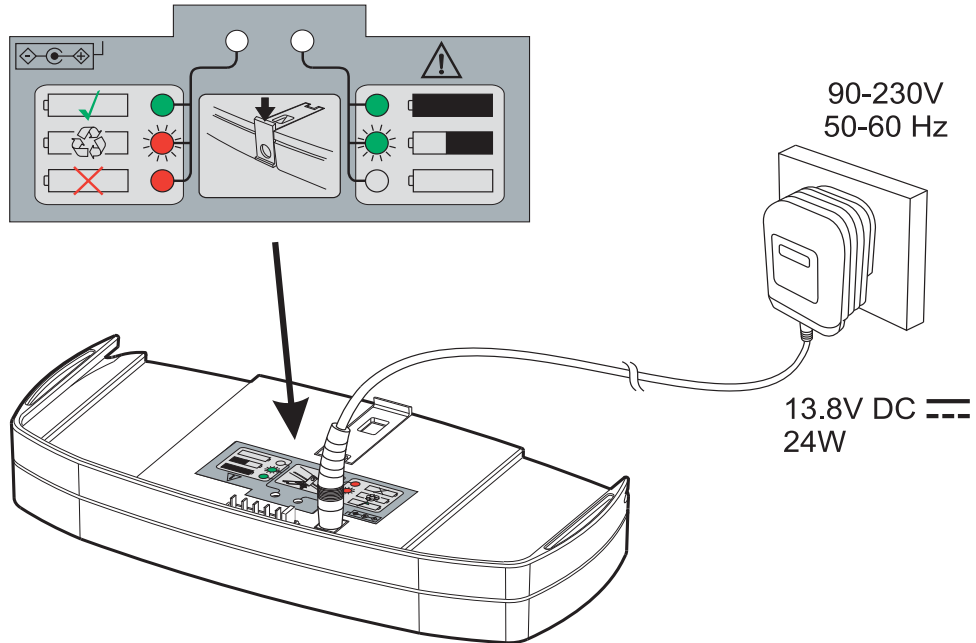
The battery pack is automatically recharged whenever the pump is connected to an AC outlet. On the display, the arrow confirms the pump is connected to AC power and the battery is charging.



## Alternative Method of Charging

Alternatively, the battery pack can be recharged away from the pump by plugging it into the battery charger as shown below.

 *Avoid charging the battery near source of heat or in direct sunlight.*



### Caution

**Only Huntleigh-approved battery chargers must be used. Use of a non-approved charger may result in damage to the battery pack or ineffective charging and therefore voids the warranty.**

---

## 9. Warranty and Service

---

### **Warranty:**

All Huntleigh Healthcare products shall conform to applicable specifications in effect from the invoice date to the end of the Warranty Period, and Huntleigh Healthcare reserves the right to change such specifications at any time with or without notice. The Warranty Period for Huntleigh Healthcare products shall be as follows, calculated from the date of invoice:

- a. Intermittent compression pumps: one year parts and labor;
- b. Single patient use garments have no warranty period, but Huntleigh Healthcare warrants that the Product meets the then current specifications at the date of receipt.

Huntleigh Healthcare's sole liability to the Customer for nonconformity of any Products to the specifications therefore, for any claim arising out of or in any way connected with the manufacture, sale, handling, or use of the Products, or for any other reasons, shall be, at Huntleigh Healthcare's sole option, limited to (i) the refund of the full purchase price for such Products, plus the invoice shipping charges, or (ii) replacement thereof, free of charge to the Customer, with Products conforming to the then current specifications, thereof. The parties agree that these remedies shall be exclusive. HUNTLEIGH HEALTHCARE, AND ITS AFFILIATES, SHALL HAVE NO LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND OR, EXCEPT AS PROVIDED ABOVE, FOR ANY CAUSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE MANUFACTURE, SALE, HANDLING OR USE OF SUCH PRODUCTS. EXCEPT AS SPECIFICALLY SET FORTH IN THIS PARAGRAPH, THERE ARE NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND THE FOREGOING PROVISIONS OF THIS PARAGRAPH ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED.

The customer is solely responsible for the proper use of the Products. Huntleigh Healthcare Products should not be used in conjunction with those of any other manufacturers.



**Service:**

The **Flowtron Universal** system should be routinely inspected (at least once a year) by a qualified biomedical service technician to assure proper operation of the pump and garment system. Inspection should verify that pressure output and timing cycles are within listed specifications, and that the audible and visual alarms function properly.

The **Flowtron Universal** pump should receive annual preventative maintenance.

All required servicing should be performed by Huntleigh Healthcare service personnel:

Please obtain a “Returned Goods Authorization” from the Customer Service Department prior to returning the product to Huntleigh Healthcare. Display the RGA number prominently on the side of the package used to return the product. This will insure prompt and accurate servicing of your product.

Return to:

Service Department  
Huntleigh Healthcare L.L.C.  
40 Christopher Way  
Eatontown, NJ 07724-3327

Telephone: (800)-223-1218

---

## 10. Cleaning Instructions

---

The pump casing is made from ABS plastic and should be cleaned using a soft cloth dampened with a mild detergent.

The pump can be disinfected by wiping down with an EPA-approved, hospital grade disinfectant, as per an appropriate protocol determined by the customer to be valid.

**However, using certain chemicals and cleaners will cause severe damage to the pump.**

- Never use phenolic, hypochlorite based disinfectants containing cationic surfactants, ammonia-based compounds, or antiseptic solutions such as Steriscol or Hibiscrub.
- Do not spray cleaning solutions directly onto the pump.
- The pump cannot be sterilized.

**All garments are single patient use. Cleaning and reuse of the garments is not recommended.**

---

# 11. Ordering Information

---

<b>Product Code</b>	<b>Description</b>	<b>Package</b>
AC600	<b>Flowtron Universal Pump</b>	1 each
BBP600	Battery Pack	1 each
ABC600	Battery Charger	1 each

To place an order please contact:

Customer Service Department  
Huntleigh Healthcare L.L.C.  
40 Christopher Way  
Eatontown, NJ 07724-3327

Telephone: (800)-223-1218

---


## 12. Technical Data

---

### Pump **507003**

Rated Voltage: 100-230V  
Rated Frequency: 50-60 Hz  
Rated Input Power: 120VA  
Size: Length: 9"  
Height: 10½"  
Depth: 6"  
Weight: 8.5 lbs  
Fuse Ratings: 2 x T3.15AH 250V T type, internally accessible only.

### Battery Pack **BBP600**

Size: 9.5" x 1.5" x 4.6"  
Weight: 1.8 lbs  
Electrical Rating: 13.8V dc  4Ah (NiMH)

### Battery Symbols



Do not dispose of in a dustbin (Recycle)



Recycle

### USA Electrical Safety Standards

Tested to: UL60601-1  
Classified by Underwriters Laboratories Inc.® with respect to electric shock, fire and mechanical hazards only in accordance with UL60601-1 25EA.

#### CAN/CSA C22.2 No. 601.1-M90

Classified by Underwriters Laboratories Inc.® with respect to electric shock, fire and mechanical and other specified hazards only in accordance with CAN/CSA C22.2 No. 601.1 25EA.

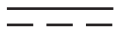
Degree of protection against electric shock: Class II With Functional Earth, Type BF

Mode of operation: Continuous

# Pump Symbols



Alternating Current



Direct Current



Double Insulated



Type BF



Run/Standby



Refer to the user manual



Fuse

**SN:**

Serial number

**Ref:**

Model number



Do not dispose of in a dustbin (Recycle) refuse



Refer to accompanying documents



Dangerous voltage



With respect to electric shock, fire and mechanical hazards only in accordance with UL60601-1 and CAN/CSA C22.2 No. 601.1



*The supply cable/plug serves as the electrical disconnect device.*

## **Environmental Conditions**

### ***Operating (Pump & Battery Pack)***

Temperature range: +50°F to +104°F (+10°C to +40°C)

Relative humidity: 30% to 75%

Atmospheric pressure 700hPa to 1060 hPa

### ***Storage (Pump)***

Temperature range: -40°F to +158°F (-40°C to +70°C)

Relative humidity: 10% to 100% (non-condensing)

Atmospheric pressure: 500 hPa to 1060 hPa

### ***Storage (Battery Pack)***

Temperature range: 14°F to +86°F (-10°C to +30°C)

Relative humidity: 30% to 75%

Atmospheric pressure: 500 hPa to 1060 hPa

***Environmental Protection:*** Please dispose of this unit in accordance with local regulations.

***Optional Battery Pack Information:***

Recharge time for fully discharged battery:	5 hours on standby
Recharge time with optional wall charger:	5 hours
End of battery life indicators:	500 recharge cycles, resulting in flashing RED LED indicators.









**United Kingdom**

**Huntleigh Healthcare Ltd**  
310-312 Dallow Road, Luton  
Bedfordshire, LU1 1TD  
T: +44 (0)1582 413104  
F: +44 (0)1582 459100

**Australia**

**Huntleigh Healthcare Pty Limited**  
PO Box 330  
Hamilton Hill  
Western Australia 6963  
T: +61 8 9 337 4111  
F: +61 8 9 337 9077

**België / Belgique / Belgien**

**Huntleigh Healthcare NV SA**  
Evenbroekveld 6  
B-9420 Erpe-Mere  
T: +32 (0) 53 60 73 80  
F: +32 (0) 53 60 73 81

**Deutschland**

**HNE Healthcare GmbH**  
Im Hülsenfeld 19  
D-40721 Hilden  
T: +49 (0)2103/97 11-0  
F: +49 (0)2103/97 11-80

**Danmark**

**Huntleigh Healthcare A/S**  
Vassingerødvej 52  
DK-3540 Lyngby  
T: +45 4 913 8486  
F: +45 4 913 8487

**España**

**Huntleigh Healthcare SL**  
Avda. de la Industria, 32-2<sup>a</sup>  
28108 - Alcobendas - Madrid  
T: +34 902 108 530  
F: +34 902 108 532

**France**

**HNE Médical SA**  
451 Chemin de Champivost  
BP20, 69579 Limonest Cedex  
T: +33 (0)4 78 66 62 66  
F: +33 (0)4 78 66 62 67

**United States of America**

**Huntleigh Healthcare L.L.C.**  
40 Christopher Way  
Eatontown  
New Jersey 07724-3327  
T: +1 (732) 578-9898 or  
+1 (888) 223-1218  
F: +1 (732) 578-9889

**Nederland**

**Huntleigh Healthcare BV**  
Antennestraat 45  
1322 AH Almere  
T: +31 (0)36 533 55 88  
F: +31 (0)36 547 50 75

**New Zealand**

**Huntleigh Healthcare Ltd**  
Unit 6/38 Eaglehurst Road  
Ellerslie, Auckland, New Zealand  
T: +64 9 525 2488  
F: +64 9 525 2433

**South Africa**

**Huntleigh Africa (Pty) Ltd**  
Willem Cruywagen Avenue  
Stand 120, Klerksoord  
Pretoria, South Africa  
T: +27 12 542 4680  
F: +27 12 542 4982

**Sverige**

**Huntleigh Healthcare AB**  
Box 30012  
S-200 61 Limhamn  
T: +46 (0)40 36 03 50  
F: +46 (0)40 49 43 75

**Switzerland**

**HNE Médical**  
5 Route de Fribourg  
1723 MARLY  
Switzerland  
T: +41 (0) 26 436 2059  
F: +41 (0) 26 436 2060

# ARJOHUNTLEIGH

**Manufactured by:**

**HUNTLEIGH HEALTHCARE LIMITED**

310-312 Dallow Road, Luton,  
Bedfordshire, LU1 1TD, United Kingdom  
**T:** +44 (0)1582 413104 **F:** +44 (0)1582 459100

Registered No: 942245 England. Registered Office As Above

**Distributed by:**

**HUNTLEIGH HEALTHCARE L.L.C.**

40 Christopher Way  
Eatontown, New Jersey 07724-3327 USA  
**T:** 1 (732) 578-9898 / 1 (888) 223-1218  
**F:** 1 (732) 578-9889

**W:** [www.huntleigh-healthcare.com](http://www.huntleigh-healthcare.com)

© Huntleigh Healthcare Limited 2002



943447