<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Package Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-V Impulse System® Controller</td>
<td>1 each</td>
<td></td>
</tr>
<tr>
<td>9075</td>
<td>InPod® Foot Cover: Regular Size, Fits Left and Right</td>
<td>4 each/Case</td>
</tr>
<tr>
<td>9076</td>
<td>Regular Size, Fits Left</td>
<td>4 each/Case</td>
</tr>
<tr>
<td>9077</td>
<td>Regular Size, Fits Right</td>
<td>4 each/Case</td>
</tr>
<tr>
<td>9078</td>
<td>InPod Small Foot Cover: Regular Size, Fits Right</td>
<td>4 each/Case</td>
</tr>
<tr>
<td>9079</td>
<td>Regular Size, Fits Left</td>
<td>4 each/Case</td>
</tr>
<tr>
<td>9087</td>
<td>Right Foot</td>
<td>12 each/case</td>
</tr>
<tr>
<td>9088</td>
<td>Left Foot</td>
<td>12 each/case</td>
</tr>
<tr>
<td>9082</td>
<td>InPod Hand Cover: Right Hand</td>
<td>4 each/case</td>
</tr>
<tr>
<td>9083</td>
<td>Left Hand</td>
<td>4 each/case</td>
</tr>
<tr>
<td>9084</td>
<td>Air Supply Hose</td>
<td>1 each</td>
</tr>
</tbody>
</table>

**Tyco Healthcare**

**Kendall**

**AV Impulse System**

**MODEL 6060**

**Operator's Instruction Manual**

**For Controller and Accessories**

**FEDERAL LAW restricts this device to sale, buy or use except on the order of a physician.**

**June 2004**
Introduction

The veins in the sole of the foot act as a very powerful natural blood pump during weight bearing and walking. Open weight bearing of the veins in the foot are firmly supported with the deep veins of the leg. The blood flow generated is highly physiological and so powerful that it can overcome calf valvular reflux to 100 mmHg. This action alone is sufficient to return blood from the foot to the right atrium of the heart in the upright position. A similar pumping mechanism exists in the palm and back of the hand. These important physiological processes led to the design of the A-V Impulse System Controller and Accessories.

The A-V Impulse System has been developed to mimic the natural function of walking and the circulation of blood in the legs. For the patient who is immobile for any reason, including as a result of trauma, surgery, or pathology, the system has been shown to increase substantially the circulation of blood in the legs. The A-V Impulse System can also enhance circulation in the arms by applying Impulse compression to the hands.

Venous stasis is accepted as being a major factor in the development of deep vein thrombosis. The A-V Impulse System has been shown to be highly effective in increasing the circulation of blood in patients with restricted mobility. It provides great benefits by reducing pain and swelling after injury or surgery, by preventing varicose veins and its associated complications, and can assist in many indications where medical judgment assesses the need for improved blood circulation.

The maintenance of blood circulation in the extremities is essential to the limb's functional status. The A-V Impulse System achieves this simply, safely and efficiently.

The A-V Impulse System

The A-V Impulse System Model 6300 consists of the main processor control unit and a high-contrast display for optimal performance, simplicity of setup and troubleshooting. The system consists of a controller connected by an interface to a specially designed Impulse Pads -- Infers.

The Infers 10 millidatio pad is rapidly inflated by a controlled Impulse of air from the controller. As the Impulse peaks, the controller automatically deflates the infers. To deliver the Impulse pressure effectively to the extremity, the Infers 10 millidatio pad must be retained in the correct position. The Infers 10 millidatio pad is available in a large right and left foot cover, in standard and wide forms, as an underfoot Infers 10 millidatio pad which can be fixed inside an over-mattress cast and a hand cover.

The system has built-in status and display to alert attention to adjustment requirements and to assist with correct Impulse squeezing.
### Alarm Night Mode

The feature minimizes patient disturbance at night while still giving clear indication of a 
problem. In Night Mode, the audible alarm sounds less frequently and the LCD flashes to 
draw attention in poorly lit conditions. To select Night Mode, double press the internal 
button, and it is shown on the LCD.

To cancel Night Mode, double press the internal button.

### Error Codes

The invention of an error code suspends unit operation. If code E23 is displayed, this 
shows that the zero temperature protection has operated. Check that the air vents on the 
rear of the unit are unobstructed, that there is nothing preventing free circulation 
around the unit, and that the environment is not excessively hot. Allow the unit to cool 
and it will automatically resume, if the problem persists, see REPAIR page 16.

### Indication

<table>
<thead>
<tr>
<th></th>
<th>Recommendation guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leg Palsy Secondary to Trauma or Surgery</td>
<td>Continuous use until severe is reduced to physician determines otherwise.</td>
</tr>
<tr>
<td>Leg Ulcers</td>
<td>Continuous use until severe is reduced to physician determines otherwise.</td>
</tr>
<tr>
<td>Venous Stasis/Venous Insufficiency</td>
<td>Cessation of edema; venous insufficiency and varicose veins.</td>
</tr>
<tr>
<td>Lymphedema</td>
<td>As required, but at least 4 hours per day.</td>
</tr>
<tr>
<td>Acute Edema</td>
<td>Continuous use until edema is reduced.</td>
</tr>
</tbody>
</table>

### 16. Hand Use

### 17. Acute Edema

[Diagram of edema areas, such as elevated compartment pressure, edema secondary to trauma and/or surgical procedure, and edema secondary to sprain, strain and other sports related injuries of the lower extremity.]

### Venous Stasis/Venous Insufficiency

Treat venous stasis, venous insufficiency and varicose veins.
Operating the System

The system is ready for operation once the following steps have taken place:

1. INFLATE button is fully depressed and connected to the controller.
2. The controller power is switched on and
3. Appropriate impulse parameters are set.

Before impulsion, ensure the patient that they will feel a bump on the sole of the foot or palm of the hand and that this mimics the normal sensation of walking or feeling of the hand.

To start impulsion:

Press RUN STOP Patient Right and/or Patient Left button(s).

To stop impulsion:

Press RUN STOP Patient Right and/or Patient Left button(s).

When a channel is turned on, the bottom section of the screen graphically displays the controller, the air hose, and the limb. A few seconds before an impulse is due to be delivered, an arrow head flashes on the controller end of the hose icon.

The arrow head moves down the hose, flashing once second before the impulse is delivered.

The impulse is shown on the limb icon at the precise moment the impulse is delivered.

NOTE: The LED shows a foot icon during either foot or hand mode, depressed size.

The impulse pressure progressively increases over a few cycles to obtain the set pressure. This allows the patient to become accustomed to the sensation. Once the set pressure has been achieved, a checkmark ($) appears next to the pressure display. The checkmark controller icon shows that the system is operating correctly.

The controller makes automatic adjustments for patient positioning and tightness of the limb. If the checkmark does not appear, check the tip of the hose.
<p>| | |</p>
<table>
<thead>
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<th></th>
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<tbody>
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<td></td>
<td></td>
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</tbody>
</table>

**Diagram:**

- [Image of a diagram related to the content]

---

**Table:**

<p>| | |</p>
<table>
<thead>
<tr>
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<th></th>
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<tbody>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Text:**

- [Text related to the content]

---

**Mathematical Formulas:**

- [Formulas related to the content]

---

**Figure:**

- [Image of a figure related to the content]

---

**Graph:**

- [Graph related to the content]
**Preset Operating Parameters**

Once the foot and leg have been wrapped, the TCD shows the controller settings. The top section of the display shows the current settings (inflating pressure and seconds duration) and the bottom section graphically shows the status of the controller including which channel is running. Channels in the lower section also provide a direct representation of any function or required adjustments.

The controller has three commonly used Impulse pressure/duration settings programmed for user convenience. These settings are available through the use of the PRESSION button. The preset time defaults to 30 seconds for all preset options.

### PRESET 1
130 mmHg Impulse Pressure - 3 second Impulse Duration

<table>
<thead>
<tr>
<th>USER Nr.</th>
<th>BUTTON TO PRESS</th>
<th>SCREEN DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>PINE</td>
<td>130</td>
</tr>
</tbody>
</table>

### PRESET 2
150 mmHg Impulse Pressure - 1 second Impulse Duration

<table>
<thead>
<tr>
<th>USER Nr.</th>
<th>BUTTON TO PRESS</th>
<th>SCREEN DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>PINE</td>
<td>130</td>
</tr>
</tbody>
</table>

### PRESET 3
80 mmHg Impulse Pressure - 1 second Impulse Duration

<table>
<thead>
<tr>
<th>USER Nr.</th>
<th>BUTTON TO PRESS</th>
<th>SCREEN DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>03</td>
<td>PINE</td>
<td>80</td>
</tr>
</tbody>
</table>

---

**Step 3**

Wrap the outside of the Inflata foot cover over the top of the foot and then overlap the outside of the Inflata foot cover, pulling it tightly and secure with the velcro strap. Next wrap the rest around the back of the heel and secure in place with the velcro strap.

Check that the cast foot cover is fitted securely and the patient is comfortable.

For Controller Directions see Section 2.

**CAUTION** FOR FULL SCAFFOLDING DO NOT WALK OR WEIGHT BEAR ON THE TCD AND ONLY INFLATE WHEN FITTED TO THE FOOT.

**WARNINGS** CHECK FOR SKIN TIGHTNESS AND USE A CONTINUOUS INFLATION ACCORDING TO CLINICAL JUDGMENT.

---

8. **Directions for Inflata under cast inflation pad**

**Step 1**

Apply stockinette cast foot, inside and leg as required. Avoid wrinkles.

**Step 2**

Select a cast pad.

Red graphics - Left Blue graphics - Right

Wrap WHEEL** Undercast Padding around the foot. Place the first缠绕 around the bottom of the cast padding and then the graphics on the pad.

**CAUTION: THE CAST INFLATION PAD MUST BE PLACED DIRECTLY UNDER ARM OF THE FOOT.**

**Step 3**

With the pad center under the foot, wrap the strip over the top of the foot and secure with the adhesive tape. The pad tube should be on the inside of the foot pointing to the front.

**Step 4**

Completely cover and secure the cast pad in place with WHEEL** Undercast Padding. Ensure that the padding is secured over all bones and on the top of the foot to eliminate possible irritation. Cast normally and take extra care that the inside of the cast is completely filled, ensuring that tubing does not kink or become obstructed.

**CAUTION: DO NOT INFLATE THE CAST PAD UNTIL THE CAST IS FULLY HARDENED.**

Use 1 second Impulse duration for the cast inflation. For Controller Directions see Section 2.