Portable Compression Cryotherapy System

Read all of the following information before using the system.

WARNING
THE BCI PORTABLE COMPRESSION CRYOTHERAPY SYSTEM COULD BE COLD ENOUGH TO SERIOUSLY DAMAGE SKIN. CHILDREN UNDER 18 YEARS OLD SHOULD NOT OPERATE THE SYSTEM WITHOUT ADULT SUPERVISION.

NOTICE
THE PUMP UNIT IS CAPABLE OF RUNNING BOTH HOT AND COLD WATER.
THE OPERATING TEMPERATURE RANGES FOR THE SYSTEM:
* FAHRENHEIT: 37.4°F ~ 122°F
* CELSIUS : 3°C ~ 50°C
OPERATING THE UNIT BEYOND THE RECOMMENDED TEMPERATURE RANGE CAN CAUSE INJURIES TO THE USER AND DAMAGE THE UNIT.

1. System description........................................................................................................Page (1)
2. Component list............................................................................................................Page (2)
3. Control unit description..............................................................................................Page (3)
4. Filling the ice container.........................................................................................Page (4)
5. Preparing the system...............................................................................................Page (5)
6. Using the system.......................................................................................................Page (5,6)
7. Charging and using the battery................................................................................Page (7)
8. Air compression function description......................................................................Page (8)
9. Troubleshooting.......................................................................................................Page (9)
10. Contraindications.....................................................................................................Page (9)
11. General warnings....................................................................................................Page (10)
Part 1: System Description
## Part 2: Component List:

<table>
<thead>
<tr>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. System bag.</td>
<td>1</td>
</tr>
<tr>
<td>2. Adjustable shoulder strap.</td>
<td>1</td>
</tr>
<tr>
<td>3. 2500ml ice container.</td>
<td>1</td>
</tr>
<tr>
<td>4. Cap.</td>
<td>1</td>
</tr>
<tr>
<td>5. Water line connector with primer bulb.</td>
<td>1</td>
</tr>
<tr>
<td>6. Water line connector with pressure limit valve.</td>
<td>1</td>
</tr>
<tr>
<td>7. Three way female side Quick-Release connector.</td>
<td>1</td>
</tr>
<tr>
<td>8. Control unit. (With water pump and pneumatic pump)</td>
<td>1</td>
</tr>
<tr>
<td>9. 9.6V DC rechargeable NI-MH battery pack.</td>
<td>1</td>
</tr>
<tr>
<td>10. Battery charger.</td>
<td>1</td>
</tr>
<tr>
<td>11. Three way connection hose. (42 inches)</td>
<td>1</td>
</tr>
<tr>
<td>12. Instruction manual.</td>
<td>1</td>
</tr>
</tbody>
</table>
The power “ON” and “OFF” buttons has a default security time delay of 2 seconds. When pressing “ON” or “OFF” button, please press and hold the button until the power indicator is lit or off.
Part 4: Filling the Ice Container

1. Unzip and open the top cover of the system bag.
2. Press and hold the power “OFF” button until the power indicator light is lit. (Also, make sure the connection hoses are disconnected)
3. Unplug the water line connectors by pulling up on the black connector ends on top of the blue ice container cap.
4. Unscrew the blue cap by twisting it counter-clockwise and remove it from the ice container.
5. Remove the ice container from the system bag.
6. Fill the ice container with clean water to the water level line and place the ice container in the freezer.
7. Wait for the water to completely freeze.

DO NOT FREEZE THE ICE CONTAINER WITH THE BLUE CAP ON AND KEEP THE ICE CONTAINER UPRIGHT IN THE FREEZER.

NOTICE

Alternative Fill Method:
Fill the ice containers with ice cubes up to the water fill line, then fill with clean water.

To prevent misplacing the blue cap, keep it in the bag when not in use.
Part 5: Preparing the System

1. Fill the ice container to the top with clean water, leaving at least a 1/4 inch air gap in the ice container.
2. Replace the blue cap on to the ice container by rotating it clockwise until snug.
3. Place ice container back into the system bag.
4. Insert water line connectors tightly into the ice container cap sockets.

Step (1)

Clean water only

Step (2)

¼” air gap

Step (3)

Step (4)

Part 6: Using the System

1. After charging the battery, place it back into the pouch in the system bag and plug it into control unit.
2. Close and zip the system bag cover to keep the ice container insulated.
3. Connect the male side of the extended tubing to the female side connector on the system bag.
4. Connect the female side of the extended tubing to the male side connector on the cooling wrap.

Step (1)

Step (2)

Step (3)

Step (4)
Part 6: Using the System

5. Press and hold the power on button until the power indicator is lit. (The power on button has a default security time delay of 2 seconds.)
6. Press and hold the MANUAL button on the control unit interface until the cooling wrap has filled with cold water.
7. Once the cooling wrap is filled with cold water, select the appropriate time cycle by pressing the indicated button on the control unit.
8. Choose and press Inf. or Inf. & Def. button to setup the compression function. (See Part 8. Air compression function description)
9. Choose the appropriate pressure and press the indicated button. (See Part 8. Air compression function description)

**NOTICE**

The system will run automatically based on the time interval, compression function, and pressure button selected.

The system defaults to a 20-minute running time. (20 Minutes AUTO shut-off.)

---

Please note that some condensation on the tubing, ice container, pump unit or cooling wraps is unavoidable, especially in warmer climates.

If a leak is detected on the cooling wrap, stop using it and email: service@gpe-bci.com or call your distributor.

To avoid leaks at the tube connection points make sure that all connections are clean and free from debris.

At initial start up if wrap is not filling with water, squeeze the primer bulb to “prime” the pump while holding the manual button.
Part 7: Charging and Using the Battery

1. Unplug the battery plug from the system's pump unit and remove the battery from the system bag.
2. Connect the battery to the battery charger cable.
3. Plug the battery charger into the wall outlet. Leave charging for up to 5 hours.
4. Unplug the battery charger from the electrical outlet.
5. Disconnect the battery from the battery charger.
6. Replace the battery back into the system bag. (See Part 4 Step 1)
7. Connect the battery to the pump unit and it is ready for use. (See Part 4 Step 1)

**Do not charge the battery for more than six (6) hours.**

- The battery pack will be slightly warm when it is being charged.
- The battery pack will be slightly warm when in use.
- When the **LOW BATTERY** indicator is lit or speed of the pump slows down, it is time to recharge the battery.
- To maximize battery life, wait for the battery to cool off before recharging it.

**NOTICE**

**WARNING**

- Charge the battery pack before first use.
- Do not use or recharge the battery pack when it is too warm to touch.
- Do not use or recharge the battery pack if it shows any sign of damage, leakage, or corrosion.
- Do not open or disassemble the battery pack.
- Do not dispose of the battery pack in fire.
- Charge the battery only using the included Nickel Hydrogen (NiH2) battery charger.
- Please dispose of the Nickel Hydrogen (NiH2) battery in the proper disposal or recycle facility.
Part 8: Air compressor function description:

**Inf. Function: Inflation only**

- **Default pressure volume**
  - Low Pressure 15 mm hg (0.2901 PSI)
  - Medium Pressure 50 mm hg (0.967 PSI)
  - High Pressure 75 mm hg (1.45 PSI)

- Pressure will remain constant until the power is turned off, the system will automatically release the air from the bag.

**Inf. & Def. Function: Inflates to the target pressure, holds for 2 minutes, and then deflates to 5 mm hg for 1 minute, and continues cycling.**

- Inflated to the target pressure
- Hold pressure for 2 min.
- Deflate to 5 mm hg
- Delay for 1 min.
- Inflated to the target pressure
- Hold pressure for 2 min.
- Deflate to 5 mm hg
- Delay for 1 min.
Part 9: Troubleshooting

✔ Please note that some condensation on the tubing, ice container, control unit or cooling wraps is unavoidable, especially in warmer climates.
✔ If a leak is detected on the cooling wrap, stop using it and email: service@gpe-bci.com or call your distributor. To avoid leaks at the tube connection points make sure that all connections are clean and free from debris.
✔ At initial start up if pad is not filling with water, squeeze the water container 5X’s to “prime” the pump while holding the manual button.

Part 10: Contraindications

Compression Therapy (vasopneumatic compression) using BCI therapy device or any compression therapy device should not be used on patients:

• Who are in the acute stages of inflammatory phlebitis in the affected region.
• Who have any history or risk factors for deep vein thrombosis or pulmonary embolus (including prolonged bed rest) in the affected region (to be treated with this therapy).
• Who have significant arteriosclerosis or other vascular ischemic disease in the affected region.
• Who have a condition in which increased venous or lymphatic return is not desired in the affected extremity. (eg, carcinoma)
• Who have decompensated hypertonia in the affected region.

Cryotherapy using BCI therapy devise or any cryotherapy device should not be used in patients:

• Who have significant vascular impairment in the affected region. (eg, from prior frostbite, diabetes, arteriosclerosis or ischemia)
• Who have acute paroxysmal cold hemoglobinuria or cryoglobulinemia.
Part 11: General warning

WARNING

• Thank you for choosing the BCI compression cryotherapy system. To assure you have the best experience possible, please be sure to read the entire Instruction Manual prior to use of the product.

• WARNINGS
  • Improper placement or prolonged use of BCI compression cryotherapy could result in tissue damage such as frostbite.
  • During the course of BCI compression cryotherapy, patients should monitor the skin surrounding the treated region or the digits of the extremities of the treated limb for any burning, itching, increased swelling, or pain. If any of these signs present, or any changes in skin appearance occur (such as blisters, increased redness, discoloration, or other noticeable skin changes), patients are advised to discontinue use and consult a physician.
  • The BCI compression cryotherapy cooling wrap is not sterile; do not place directly against open wounds, sores, rashes, infections, or stitches. May be applied over clothing or dressing.
  • The BCI compression cryotherapy cooling wrap are available in multiple configurations but are not intended for all possible orthopedic uses. Use caution when selecting a particular wrap for use on anatomic regions other than that for which the wrap is indicated and closely supervise the patient’s status. For example, the Ankle Wrap is not designed for use on the toes and the Back Wrap is not designed for use in the abdominal region.
  • Compression Therapy (vasopneumatic compression) with the BCI compression cryotherapy unit should be used only under the supervision of a licensed healthcare practitioner in patients:
    • Who have a wound in the affected region. (the wound must be dressed prior to use of BCI Compression cryotherapy)
    • Who have an acute, unstable (untreated) fracture in the affected region.
    • Who are children under 18 years old or patients who have cognitive disabilities or communication barriers, whether temporary due to medication or permanent.
    • Who have a cardiac insufficiency or congestive heart failure. (with associated edema in the extremities or lungs)
    • Who have a localized skin condition (eg, dermatitis, vein ligation, gangrene, skin graft) in the affected region.
    • Who have erysipelas or other active infection in the affected region.
  • Cryotherapy with the BCI compression cryotherapy should be used only under the supervision of a licensed healthcare practitioner in patients:
    • Who have Raynaud’s disease or cold hypersensitivity. (cold urticaria)
    • Who have hypertension or extreme low blood pressure.
    • Who have diabetes.
    • Who have compromised local circulation or neurologic impairment (including paralysis or localized compromise due to multiple surgical procedures) in the affected region.
    • Who have rheumatoid arthritis in the affected region.
    • Who have known and uncontrolled peptic ulcer (if the affected region is the abdominal region) since cold therapy applied to the abdomen can cause increased gastrointestinal motility and gastric acid secretion.
  • To avoid the risk of electrical shock, keep electrical connections dry, do not handle the control unit with wet hands. Always keep the unit in a place where the electrical connections will not fall into water. (e.g; a tub, sink, etc.)