USER MANUAL
For Clinicians

Important Safety Information Accompanies This Device

Indications, Contraindications, Warnings, Precautions and other Safety Information are contained in the V.A.C.ULTA™ Negative Pressure Wound Therapy System (V.A.C.ULTA™ Therapy System) Safety Information. This safety information booklet is provided with the therapy unit and also included in V.A.C. VERAFALO™ Dressing cartons. Please consult this V.A.C.ULTA™ Therapy System User Manual and the safety information before applying V.A.C.® Therapy or V.A.C. VERAFALO™ Therapy. Before applying PREVENA™ Therapy or ABTHERA™ Therapy, consult the safety information and instructions for use provided in PREVENA™ and ABTHERA™ Dressing cartons. If there are questions, or if the safety information is missing, immediately contact your local KCI representative.


As with all prescription medical devices, failure to follow product instructions or adjusting settings and performing therapy applications without the express direction and/or supervision of your trained clinical caregiver may lead to improper product performance and the potential for serious or fatal injury. For medical questions, please consult a physician. In case of medical emergency, immediately contact your local emergency services provider.

CAUTION: Federal law (US) restricts this device to sale or rental by or on the order of a physician.

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Warnings: Important Information For Users

In order for KCI products to perform properly, KCI recommends the following conditions. Failure to comply with these conditions will void any applicable warranties.

- Use this product only in accordance with this manual and applicable product labeling.
- Assembly, operations, extensions, re-adjustments, modifications, technical maintenance or repairs must be performed by qualified personnel authorized by KCI. For these authorized personnel, KCI will make available upon request circuit diagrams, component parts lists, etc. as required for repairs.
- Ensure the electrical installation of the room complies with the appropriate national electrical wiring standards. To avoid the risk of electrical shock, this product must be connected to a grounded power receptacle.
- Do not operate this product if it has a damaged power cord, power supply or plug. If these components are worn or damaged, contact KCI.
- Do not drop or insert any object into any opening or tubing of this product.
- Do not connect this product or its components to devices not recommended by KCI.
- Use only V.A.C.® Dressings (V.A.C.® GRANUFOAM™ Dressings, V.A.C.® GRANUFOAM SILVER™ Dressings, V.A.C.® WHITEFOAM™ Dressings, V.A.C.® VERAFLÔ™ Dressings), PREVENA™ Dressings or ABTHERA™ SENSAT.R.A.C.™ Open Abdomen Dressings and associated disposables with this product.
- Keep this product away from heated surfaces.
- Although this product conforms to the intent of the standard IEC 60601-1-2 in relation to Electromagnetic Compatibility, electrical equipment may produce interference. If interference is suspected, separate the equipment and contact KCI.
- Avoid spilling fluids on any part of this product.

**Fluids remaining on the electronic controls can cause corrosion that may cause the electronic components to fail. Component failures may cause the unit to operate erratically, possibly producing potential hazards to patient and staff.** If spills do occur, unplug the unit immediately and clean with an absorbent cloth. Ensure there is no moisture in or near the power connection and power supply components before reconnecting power. If the product does not work properly, contact KCI.

- Do not use this product while bathing / showering or where it can fall or be pulled into a tub, shower or sink.
- Do not reach for a product that has fallen into water. Unplug the unit immediately if plugged into electrical source. Disconnect the unit from dressing and contact KCI.
- Do not use this product in the presence of a flammable anesthetic mixture with air, oxygen, or nitrous oxide, or an oxygen enriched environment.
- Do not take this product into an MR environment. This product is **MR Unsafe**.

**Notice** - This product has been configured from the manufacturer to meet specific voltage requirements. Refer to the product information label for specific voltage.

Colors Used in this Manual

- Screen Button / Screen name - Screen names and Screen Buttons.
- ABTHERA™ Therapy - Items and information that relate specifically to ABTHERA™ Therapy.
- PREVENA™ Therapy - Items and information that relate specifically to PREVENA™ Therapy.
- V.A.C.® Therapy - Items and information that relate specifically to V.A.C.® Therapy.
- V.A.C. VERAFLÔ™ Therapy - Items and information that relate specifically to V.A.C. VERAFLÔ™ Therapy.
- System - Items and information that relate specifically to the V.A.C.Ulta™ Therapy Unit.
Introduction

The V.A.C.ULTA™ Negative Pressure Wound Therapy System is an integrated wound management system that provides:

- **V.A.C.® Negative Pressure Wound Therapy** (1)
- **V.A.C. VERAFLÔ™ Instillation Therapy** (2)
- **PREVENA™ Incision Management Therapy** (3)
- **ABTHERA™ SENSAT.R.A.C.™** Open Abdomen Therapy (4).

Refer to the V.A.C.ULTA™ Negative Pressure Wound Therapy System (V.A.C.ULTA™ Therapy System) Safety Information that accompanies the V.A.C.ULTA™ Therapy Unit for complete Indications for Use for each of these therapies and safety and use information.

**V.A.C.® Negative Pressure Wound Therapy** (with two negative pressure modes):

The **V.A.C.® GRANUFOAM™, V.A.C.® GRANUFOAM SILVER™** and, **V.A.C. WHITEFOAM™ Dressings** are available for use with the **V.A.C.® Therapy** option by the V.A.C.ULTA™ Therapy System. Additional dressings specific to **V.A.C. VERAFLÔ™ Therapy** are also available.
V.A.C. VERAFLO™ Instillation Therapy:

** Fill Assist allows the user to monitor initial wound fill by manually starting and stopping instillation to determine correct instill volume after dressing is applied. Once determined, this volume will be the set point for each subsequent instill phase of V.A.C. VERAFLO™ Therapy.

*** Continuous and DPC Therapy negative pressure modes are available with V.A.C. VERAFLO™ Therapy.

The V.A.C. VERAFLO™, V.A.C. VERAFLO CLEANSE™ and V.A.C. VERAFLO CLEANSE CHOICE™ Dressings are available for use with the V.A.C. VERAFLO™ Therapy option provided by the V.A.C.ULTA™ Therapy System.

PREVENA™ Incision Management Therapy:

The PREVENA™ PEEL & PLACE™ and PREVENA™ CUSTOMIZABLE™ Dressings are available for use with the PREVENA™ Therapy option provided by the V.A.C.ULTA™ Therapy System.
The ABTHERA™ SENSAT.R.A.C.™ Open Abdomen Dressing is available for use with the ABTHERA™ Therapy option provided by the V.A.C.ULTA™ Therapy System.

The V.A.C.ULTA™ Negative Pressure Wound Therapy System is intended to be operated by qualified clinical caregivers in the acute care setting. In-service and training programs for use of V.A.C.* Therapy, V.A.C. VERAFLÔ™ Therapy, PREVENA™ Therapy and ABTHERA™ Therapy are available. Therapy unit information signals should be monitored by the clinical caregiver. Patients are not expected to apply or change dressings or adjust therapy unit settings.
V.A.C.UTA™ Therapy System Key Features and Benefits

**Therapy Selection** - Allows user to select V.A.C. VERAFLÒ™, V.A.C.®, PREVENA™ or ABHERA™ Therapies.

**Fill Assist (V.A.C. VERAFLÒ™ Therapy)** - Allows the user to monitor the initial wound fill by manually starting and stopping instillation to determine the appropriate instill volume after the dressing is applied. Once determined, this volume will be the set point for each future instill phase of V.A.C. VERAFLÒ™ Therapy.

**Benefits:**
- Removes the guesswork related to volume setting
- Helps reduce leaks caused by wound overfilling

**Volumetric Delivery with Solution Dwell Time (V.A.C. VERAFLÒ™ Therapy)** - The V.A.C.UTA™ Therapy Unit provides unique and patented volumetric fluid delivery utilizing a pump.

**Benefits:**
- Delivers fluid reliably and uniformly across wound bed.
- Allows time for solubilizing infectious materials and wound debris.

**Automated and Cyclic Wound Cleansing (V.A.C. VERAFLÒ™ Therapy)** - V.A.C. VERAFLÒ™ Therapy is 100% automated after set-up, providing hands-free, repeating wound cleansing cycles through instillation of topical wound solutions.

**Benefits:**
- Delivers automatic and repetitive topical wound cleansing without dressing removal.
- Eliminates need for manual wound cleansing between dressing changes.

**V.A.C. VERALINK™ Cassette (V.A.C. VERAFLÒ™ Therapy)** - This disposable component connects the V.A.C.UTA™ Therapy Unit to the solution bag / bottle and dressing tubing.

**Benefits:**
- It provides convenient solution storage and delivery.

**Dressing Soak (V.A.C.® Therapy and V.A.C. VERAFLÒ™ Therapy)** - This tool allows the clinician to soak the dressing and the wound with instillation solution in preparation for a dressing change.

**Benefits:**
- Provides ability to help "float" the dressing by increasing instillation volume and soak time.
- Moistens and softens the dressing for easier removal and patient comfort.
Additional Features

Touch Screen User Interface: The touch screen user interface allows for easy navigation through operational and help menus. A screen guard is available to help prevent unintentional changes. A settings lock is available to prevent patient access to therapy settings.

Adjustable Negative Pressure Settings and Therapy Modes: Settings can be selected from a range of 25 mmHg to 200 mmHg in increments of 25 mmHg depending on settings available for selected therapy. In addition, V.A.C.™ Therapy and V.A.C. VERAFLÒ™ Therapy can be set for continuous negative pressure or Dynamic Pressure Control™ (DPC) Therapy.

SEAL CHECK ™ Leak Detector: This tool assists the user in finding negative pressure leaks in the system through the use of audible tones and on-screen visual aids during the troubleshooting process.

History Reports: The V.A.C.ULTA™ Therapy System provides three possible reports: 1. Alarm History, 2. Therapy History, and 3. Patient History. These chronologically logged reports include the date and times for therapy starts / stops, therapy settings, alarm occurrences, and disposable component changes. They can be reviewed on-screen or transferred electronically from the V.A.C.ULTA™ Therapy Unit via a non-powered USB flash memory stick or SD memory card.

SENSAT.R.A.C.™ System: The SENSAT.R.A.C.™ System (also incorporated in the V.A.C. VERAT.R.A.C.™ Pad, V.A.C. VERAT.R.A.C. DUO™ Tube Set, PREVENA PLUS™ Incision Management System, and ABTHERA™ SENSAT.R.A.C.™ Open Abdomen Dressing System) monitors and maintains target pressure at the wound site, helping to deliver consistent therapy. This system includes therapy unit hardware and software, wound exudate collection canister, canister detection method, multi-lumen tubing, connector and SENSAT.R.A.C.™ Pad.

Not available with the PREVENA™ Dressing without SENSAT.R.A.C.™ Pad.

In-Line Tubing Connectors: The system incorporates an in-line dressing connector and tubing clamps to conveniently allow the wound dressing to be temporarily disconnected from the therapy unit.

Canisters: The V.A.C.ULTA™ Therapy Unit is optimized for use with 300 mL, 500 mL or 1000 mL canisters. These are the same canisters used with INFOV.A.C.™ Therapy Unit. Canisters are single use, manufactured without natural rubber latex, sterile components.

Canister Release Button: The canister release button is illuminated and will flash when the canister is full.

Intensity Setting: Intensity is related to the time it takes to reach the target negative pressure therapy level after the initiation of therapy. The lower the intensity setting, the longer it will take to reach the target negative pressure.

Wound Image Analysis: Digital wound images can be uploaded from a digital camera into the V.A.C.ULTA™ Therapy Unit. When the wound perimeter is traced on-screen with the provided stylus, wound image surface area and volume can be calculated and trended by the therapy unit. A chronological graphical history of the wound (with wound image area trend chart) can be viewed on-screen or this information can be transferred from the V.A.C.ULTA™ Therapy Unit electronically. This information is intended to be used by the treating clinician as a mechanism for providing a record of wound healing progress; it is not intended for use in the diagnosis and treatment of wounds.

Hanger Mechanism: The therapy unit can be securely mounted to an I.V. pole, a bed footboard or a wheelchair.

Battery Operation: In order to facilitate patient transfer, battery operation is available with the V.A.C.ULTA™ Therapy Unit. During typical usage, the battery may provide up to six hours of operation before needing to be recharged.
V.A.C.ULTA™ Therapy Unit Component Identification

**V.A.C.ULTA™ Therapy Unit - Front**

- Power Button
- Touch Screen
- Unit Serial Number Label
- Battery Changing Indicator Light
- Speaker
- SD Card Slot
- USB Port
- Stylus
- Canister Release Button

**V.A.C.ULTA™ Therapy Unit - Back**

- Solution Container Hanger Arm
- Solution Container Hanger Arm Lock
- Unit Hanger Knob
- Unit Hanger Arm
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Preparation for Use

Charge Battery

The V.A.C.ULTA™ Therapy Unit comes with its own power supply and a rechargeable battery. The battery is not user accessible or serviceable. The power supply has a two-part cord, one that plugs into an AC wall outlet and one that plugs into the V.A.C.ULTA™ Therapy Unit.

Use only the power supply provided with the V.A.C.ULTA™ Therapy Unit (part number: 4103730). Using any other power supply may damage the V.A.C.ULTA™ Therapy Unit.

If environmental conditions (specifically, low humidity) pose a risk of static electricity, take care when handling the V.A.C.ULTA™ Therapy Unit while it is plugged into an AC wall outlet. In rare instances, discharge of static electricity when in contact with the therapy unit may cause the touch screen to darken, or the therapy unit to reset or turn off. If therapy does not restart by powering the unit off and then on, immediately contact KCI.

To isolate the therapy unit from supply mains, unplug the AC power cord from the wall outlet. Do not block access to the plug or wall outlet.

Power cords may present a tripping hazard. Ensure that all cords are out of areas where people may walk.
1. Plug the AC power cord into the DC power supply.

2. Plug the AC wall plug into an AC wall outlet.

   **DC power supply must remain accessible at all times to allow for immediate disconnect from power source, if necessary.**

3. Locate the arrow on the charging cord connector. The arrow should face up as the connector is plugged into the power connection on the V.A.C.ULTA™ Therapy Unit.
4. A plug indicator appears on screen while the unit is plugged into a wall outlet.

**Plug Indicator**

**Battery Charging**

*It should take approximately four hours to fully recharge the battery. To maximize battery life, keep the unit plugged in whenever possible.*

When the V.A.C.ULTA™ Therapy Unit is correctly plugged into the V.A.C.ULTA™ Power Supply, the battery charging indicator light on the front of the unit (page 18) will glow amber while the battery is charging. When the battery has reached full charge the battery charging indicator light will glow green.

**Therapy Unit Placement**

The V.A.C.ULTA™ Therapy Unit can be attached to an I.V. pole or the footboard of a hospital bed. If required, it can be placed on a solid, level surface where it does not cause an obstruction. The V.A.C.ULTA™ Therapy Unit should be placed where cables and tubes cannot be caught on passing objects.

*Power cords and tubing may present a tripping hazard. Ensure that all cords and tubing are out of areas where people may walk.*

*The V.A.C. ULTA™ Therapy Unit is not to be carried or worn by an ambulatory patient. Consult your physician and contact KCI for V.A.C.* The V.A.C. ULTA™ Therapy Unit can be placed on an I.V. pole, bed frame or wheelchair during patient transport.*
Attaching the Therapy Unit to an I.V. Pole

1. Hold the V.A.C.ULTA™ Therapy Unit by the carry handle, grip the hanger knob and pull the hanger arm out (1).

2. Place the hanger around the I.V. pole and allow the hanger to close, pulling the unit onto the I.V. pole (2). Ensure that the pole is in the vertical rubber groove (at both top and bottom) on the rear of the V.A.C.ULTA™ Therapy Unit.

3. Turn the hanger knob to lock the hanger arm in place (3). When the arrow symbol on the hanger knob aligns with the lock symbol, the hanger arm is locked.

4. Reverse procedure to remove therapy unit.
Attaching the Therapy Unit to a Bed Footboard

1. Hold the V.A.C.ULTA™ Therapy Unit by the carry handle, grip the hanger knob and pull the hanger arm out (1).
2. Place the hanger over the footboard. Allow the hanger to close, pulling the unit onto the footboard (2).
3. Turn the hanger knob to lock the hanger arm in place (3). When the arrow symbol on the hanger knob aligns with the lock symbol, the hanger arm is locked (4).
4. Reverse procedure to remove therapy unit.
Attaching the V.A.C. VERALINK™ Cassette

For use only with the V.A.C.® Therapy when using the Dressing Soak Feature or V.A.C. VERAFLO™ Therapy.

1. Remove the V.A.C. VERALINK™ Cassette from packaging and insert the pivot connection of the V.A.C. VERALINK™ Cassette (1) into the pivot slot on the V.A.C.ULTA™ Therapy Unit.

2. Pivot the V.A.C. VERALINK™ Cassette Release Tab toward the unit (2) and press firmly until it clicks into place (3).

The V.A.C. VERALINK™ Cassette is designed to fit tight to the therapy unit. Apply very firm pressure to ensure the cassette is properly installed.
**Attaching Solution Bag / Bottle**

*For use only with the V.A.C.* Therapy when using the Dressing Soak Feature or *V.A.C. VERAFLÔ™ Therapy*

**Extend Solution Container Hanger Arm:**

1. Fully lift the solution container hanger arm lock (1).

2. Raise solution container hanger arm (2). Depending on unit, either rotate the handle 180 degrees (3A) or flip the handle up (3B).

3. Fully push the solution container hanger arm lock down (4) to lock solution container hanger arm in place.
For use only with the V.A.C.® Therapy Dressing Soak Feature or V.A.C. VERAFLO™ Therapy.

1. Ensure cassette tubing is routed in the retention groove on the unit handle by applying pressure to push tubing into the groove.

2. Spike solution bag / bottle according to manufacturer’s instructions using the V.A.C. VERALINK™ Cassette’s tubing spike (1).

3. Hang the solution bag / bottle from the therapy unit’s solution container hanger arm (2).

4. Adjust the solution container hanger arm (3) while manipulating the bag / bottle to ensure that the spike is held inside the slot in the V.A.C. VERALINK™ Cassette Basket (4).

Ensure tubing is not kinked or pinched.
For use only with the V.A.C.® Therapy Dressing Soak Feature or V.A.C. VERAFLÒ™ Therapy.

Refer to the appropriate dressing Instructions for Use for safety information and procedures to apply and change the dressing.

1. Remove the cap from the end of the V.A.C. VERALINK™ Cassette tubing (1).

2. Connect the V.A.C. VERALINK™ Cassette tubing to the instillation line of the V.A.C. VERAT.R.A.C.™ Pad / V.A.C. VERAT.R.A.C. DUO™ Tube Set by pushing the connectors together (2).

3. Twist connectors until the locking tabs are fully engaged (3).

4. Open all tubing clamps (4).
Canister Installation

When selecting canister size (300 mL, 500 mL, 1000 mL), consider the amount of wound exudate and selected therapy. If delivering V.A.C. VERAFLÓ™ Therapy, also consider the amount of wound instillation fluid and frequency of instillation.

If delivering PREVENA™ Therapy, consider using the smallest available canister for the V.A.C.UTA™ Therapy Unit.

1. Slide the canister into the side of the V.A.C.UTA™ Therapy Unit (1).

2. Push the canister (500 mL shown) firmly into place on the V.A.C.UTA™ Therapy Unit (2). An audible click indicates the canister is fully seated. Ensure the canister is installed directly onto the therapy unit. Do not twist or turn the canister as it is being installed.

3. Connect the canister tubing to the dressing tubing by pushing the connectors together (3).

A PREVENA™ V.A.C.* Connector will be needed to connect the PREVENA™ Dressing to the V.A.C.UTA™ Therapy Unit Canister. This connector, which is available in the PREVENA™ Dressing package, must be used for negative pressure wound therapy to work effectively and accurately.
4. Twist connectors until the locking tabs are fully engaged (4).

5. Open all tubing clamps (5).
Changing the Canister

A canister may be changed under routine conditions or under alarm conditions. Under routine conditions the canister release button will NOT be flashing. When changing the canister DO NOT power off the V.A.C.ULTA™ Therapy Unit.

Under Canister Full Alarm conditions, the canister release button (page 18) will be flashing, an alert / alarm screen (pages 56, 90, 116 and 134) will be displayed and therapy will be off (unit power remains on).

*When delivering PREVENA™ Therapy, a canister change should not be required. Contact the treating physician immediately if a Canister Full Alarm occurs during PREVENA™ Therapy.*

The canister used for V.A.C.® Therapy, V.A.C. VERAFLO™ Therapy and ABTHERA™ Therapy should be changed when full (the alarm will sound), or at least once a week to control odor.

*If a Canister Full Alarm has occurred, pump will be OFF. Proceed to Step 2.*

1. **V.A.C.® Therapy, PREVENA™ Therapy, ABTHERA™ Therapy** - Stop therapy by selecting Start / Stop on the touch screen. Do not turn power off to the V.A.C.ULTA™ Therapy Unit.

2. **V.A.C. VERAFLO™ Therapy** - Stop therapy by selecting Pause / Resume on the touch screen. Do not turn power off to the V.A.C.ULTA™ Therapy Unit.

2. Slide both tubing clamps toward the tubing connector.

3. Tightly close both tubing clamps (1) to prevent spillage of contents in tubing. Several clicks should be heard.

4. Twist the tubing connectors until the locking tabs are disengaged (2).

5. Pull the connector apart (3) to disconnect the dressing tubing from the canister tubing.
6. Press the **Canister Release** Button.

7. **Warning:** If the 300 mL ACTIV.A.C.™ Canister is used, it is NOT held in place by the cradle of the V.A.C.ULTA™ Therapy Unit. When removing the 300 mL ACTIV.A.C.™ Canister from the V.A.C.ULTA™ Therapy Unit, hold the canister **FIRMly** before pressing the canister release button.

7. Remove the canister from the therapy unit by lifting and pulling the canister away from the unit (4).

   ![Image](image.png)

   *Dispose of the used canister according to institution and/or local environmental regulations.*

8. Install the new canister and reconnect tubing as described in the **Canister Installation** section (page 32) of this user manual.

9. **V.A.C.® Therapy, PREVENA™ Therapy, ABTHERA™ Therapy** - Select **Start / Stop** on the touch screen to restart therapy.

   **V.A.C. VERAFLÒ™ Therapy** - Select **Pause / Resume** on the touch screen to restart therapy.
Operation

This chapter contains instructions for setting and adjusting functions of the V.A.C.ULTA™ Therapy Unit.

Review all sections of this manual prior to product use. Carefully read the Indications, Contraindications, Warnings, and Precautions included with the unit prior to operating the V.A.C.ULTA™ Therapy Unit.

Touch Screen

The display on the front of the unit is touch sensitive. The user interface screens will be shown on this display. These screens will display information on current system operations and settings based on the tab selected (Therapy, History or Utilities).

The operation of the touch screen is detailed in the following pages.

*The touch screen should only be operated by finger or the supplied stylus. Using pens or other pointing devices will damage the screen.*
V.A.C.™ ULTRA™ Therapy System - Therapy Options

The V.A.C.™ ULTRA™ Therapy System can be used with four different therapies depending on physician orders:

**V.A.C.® Negative Pressure Wound Therapy (1):**

1. V.A.C.® Therapy (continuous)

2. DPC (Dynamic) Therapy

**V.A.C. VERAFLO™ Instillation Therapy (2):**

2. Phases of V.A.C. VERAFLO™ Therapy
   (Start Phase: Instill)

- Draw Down*
- Instill Fluid**
- Soak
- V.A.C.® Therapy***

* SEAL CHECK™ Leak Detector

** Fill Assist allows the user to monitor initial wound fill by manually starting and stopping instillation to determine correct instill volume after dressing is applied. Once determined, this volume will be the set point for each subsequent instill phase of V.A.C. VERAFLO™ Therapy.

*** Continuous and DPC Therapy negative pressure modes are available with V.A.C. VERAFLO™ Therapy.
**PREVENA™ Incision Management Therapy (3):**

3 **PREVENA™ Therapy**

Mode

Continuous

Negative Pressure Profile

- 125 mmHg
- 0 mmHg

**ABTHERA™ SENSAT.R.A.C.™ Open Abdomen Therapy (4):**

4 **ABTHERA™ Therapy**

Mode

Continuous

Negative Pressure Profile

- Target: 100 - 150 mmHg
- 0 mmHg
Touch Screen - Tabs

The touch screen is divided into three sections, each marked by a separate tab. These tabs allow access to the different areas of the V.A.C.ULTA™ Therapy Unit’s software.

**Therapy Tab** - (pages 50, 85, 110 and 129) Use to access the Home screen, therapy settings, features and active therapy summary information. Use the Therapy Settings button on the Therapy Tab to select prescribed therapy (V.A.C. VERAFLO™ Therapy, V.A.C.® Therapy, PREVENA™ Therapy or ABTHERA™ Therapy).

**History Tab** - (page 155) Use to access to all therapy history for the patient.

**Utilities Tab** - (pages 74, 106, 126 and 144) Use to access therapy related features and to set system preferences including language, unit of measure, date, screen brightness, etc. KCI contact information and software version can also be viewed.
Common Touch Screen Buttons

Most screens have one or more common control buttons. These are:

- **Help** - Access Help screens
  
- **Screen Guard / Settings Lock** - Activate the Screen Guard feature to prevent unintentional changes. This feature should be used when cleaning the touch screen (page 192). Select and hold for more than five seconds to activate or deactivate Settings Lock. Settings Lock prevents patient access to therapy settings.

- **Night Mode** - Activate Night Mode feature to darken the touch screen. When Night Mode is active, the display will turn on at lowest brightness setting when the touchscreen is touched. To cancel Night Mode, select Night Mode to return to previous brightness setting.

- **OK** - Confirm selection

- **Exit** - Close pop-up screen

- **Cancel** - Cancel operation

- **Back** - Return to previous screen

- **Forward** - Advance to next screen

- **+ or -** - Use + / - to adjust above or below values shown.

- **Information** - Select to view Therapy Summary and Current Settings screens for the active therapy.

- **Start / Stop** - Select to restart therapy (V.A.C. Therapy, PREVENA™ Therapy, ABTHERA™ Therapy).

- **Pause / Resume** - Select to restart therapy (V.A.C. VERAFLÖ™ Therapy).
Power the V.A.C.ULTA™ Therapy Unit On or Off

The Power button is located in the upper left hand corner on the front of the unit (page 18). Press and hold the Power button until the light comes on to turn the V.A.C.ULTA™ Therapy Unit on. The unit will go through a self-check routine and then present the Startup screen. Press and hold the Power button until the display turns off to turn the V.A.C.ULTA™ Therapy Unit off.

The Startup screen will be displayed one of two ways:

The first time the V.A.C.ULTA™ Therapy System is used following a quality checklist inspection and cleaning, the New Patient screen will be displayed.

Select V.A.C. VERAFLÔ Therapy to configure the therapy unit for use with V.A.C. VERAFLÔ Therapy (page 44). Select V.A.C.® Therapy to configure the therapy unit for use with V.A.C.® Therapy (page 81). Select PREVENA™ Therapy to configure the therapy unit for use with PREVENA™ Therapy (page 109). Select ABTHERA™ Therapy to configure the therapy unit for use with ABTHERA™ Therapy (page 127).

A new therapy mode can not be selected until the current therapy mode is stopped. The selection button for the inactive therapies will not be available.
If the V.A.C.ULTA™ Therapy Unit has been previously set up and the unit is power cycled (turned off then back on), the Startup Screen will display Continue Therapy and QC Checklist.

**Continue Therapy** - Select to accept Warning and return to previously used therapy Home screen (pages 50, 85, 110 and 129).

**QC Checklist** - Select to accept the Warning and proceed to Quality Checklist inspection process.

**Accompanying Service Documentation is required to use QC Checklist functions. Please contact KCI for more information.**

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**New Patient Screen**

Use this screen to enter the patient’s information into the V.A.C.ULTA™ Therapy Unit. Patient information is encrypted.

**Therapy configuration may not display this screen.**

Use the onscreen keyboard to enter the following:

- Patient’s First Name
- Patient’s Last Name
- Patient’s Department / Unit
- Patient’s (Identification) ID

Once this information has been entered, select **OK** to continue to the Choose Therapy screen.

**At least one character must be entered into each entry row.**
V.A.C. VERAFLÔ™ Therapy Configuration - Default Settings Overview

The following flow chart shows the basic steps required to configure V.A.C. VERAFLÔ™ Therapy using the Default settings. Refer to the pages listed for detailed information about individual screens and options.

Press and hold **Power** button until light comes on.

**Required for V.A.C. VERAFLÔ™ Therapy:**
- Canister
- V.A.C. VERAFLÔ™ Dressing
- V.A.C. VERALINK™ Cassette
  - 100 - 1000 mL solution bag / bottle

Select V.A.C. VERAFLÔ™ Therapy (page 42).

Select OK to accept default settings.

Fill Assist procedure will begin (could take up to 2 1/2 minutes to prepare the dressing seal and minimize solution leak potential).

Select Start / Stop to start instilling fluid into dressing. Select Start / Stop again to stop instilling fluid into the dressing.

Screen shots shown above are for representation only. Refer to the page numbers listed for a more detailed view and more detailed information.

Settings displayed will vary depending on settings defined by user.
V.A.C. VERAFLÒ™ Therapy Configuration - Advanced User Defined Settings Overview

The following flow chart shows the basic steps required to configure V.A.C. VERAFLÒ™ Therapy with User defined settings including turning Fill Assist OFF. Refer to the following pages for detailed information about individual screens and options.

Press and hold Power button until light comes on.

Required for V.A.C. VERAFLÒ™ Therapy:
- Canister
- V.A.C. VERALINK™ Cassette 100 - 1000 mL solution bag / bottle

Select V.A.C. VERAFLÒ™ Therapy (page 42).

Drawdown begins.

Select OK to accept settings.

Configure Instill phase of V.A.C. VERAFLÒ™ Therapy as prescribed (page 46). Select OK.

Configure V.A.C.® Therapy phase of V.A.C. VERAFLÒ™ Therapy as prescribed (page 46). Select Next.

Screen shots shown above are for representation only. Refer to the page numbers listed for a more detailed view and more detailed information.

Settings displayed will vary depending on settings defined by user.
Configure V.A.C. VERAFLO™ Therapy - Advanced User Defined Settings

These screens are used to configure the V.A.C.ULTA™ Therapy Unit to deliver **V.A.C. VERAFLO™ Therapy**:

- **Target Pressure (mmHg)** - *(Default = 125 mmHg)*
  Prescribed negative pressure level for V.A.C.® Therapy phase. Target Pressure can be set from 50 - 200 mmHg in 25 mmHg increments.

- **Intensity** *(Default = Medium)*
  Related to the time it takes to reach the target pressure after the initiation of therapy. The lower the intensity setting, the slower the target pressure will be reached. It is recommended that new patients begin therapy at the lowest intensity setting as this allows for slower increase of negative pressure once the foam is compressed in the wound. The intensity can remain at the minimum setting throughout the entire length of treatment, if desired.

- **V.A.C.® Therapy Mode** *(Default = Continuous)*
  Available modes include **Continuous** and **DPC**. Continuous provides constant negative pressure at selected Target Pressure. DPC provides negative pressure between preset low pressure (25 mmHg) and selected Target Pressure.

- **Cycle Rise Time** *(Default = 3 minutes)*
  Time used to transition from the preset low pressure (25 mmHg) to the selected target pressure while using DPC. Cycle Rise Time can be set from one minute to 10 minutes in one minute increments.

- **Cycle Fall Time** *(Default = 3 minutes)*
  Time used to transition from the selected target pressure to the preset low pressure (25 mmHg) while using DPC. Cycle Fall Time can be set from one minute to 10 minutes in one minute increments.

1. Select desired value by selecting or sliding finger / stylus along bar. Use + / - to adjust above or below values shown.

- **Fill Assist** *(Default = ON)*
  Fill Assist allows the user to monitor initial wound fill by manually starting and stopping instillation to determine correct instill volume after dressing is applied. Once determined, this volume will be the set point for each subsequent instill phase of **V.A.C. VERAFLO™ Therapy** (page 48).

- **Start Phase** *(Default = Instill)* *(Default = 10 mL if Fill Assist is Off)*
  Sets first phase of **V.A.C. VERAFLO™ Therapy** (pages 14 and 38).

- **Soak Time (minutes)** *(Default = 10 minutes)*
  Duration of time instilled solution will remain in wound during each soak phase of **V.A.C. VERAFLO™ Therapy**. Soak Time can be set from 1 second to 30 minutes with varying increments.

- **V.A.C.® Therapy Time (hours)** *(Default = 3 1/2 hours)*
  Duration of time that negative pressure will be applied during each **V.A.C.® Therapy** phase of **V.A.C. VERAFLO™ Therapy**. **V.A.C.® Therapy** Time can be set from 3 minutes to 12 hours with varying increments.
2. Select **Next** to continue to the **V.A.C. VERAFLÓ™ Settings (page 2 of 2)** screen.

Select **Restore Defaults** to return all therapy settings to their defaults.

3. Once all settings have been entered or defaults restored, select **OK** to continue to the **Confirm Settings** screen. This screen allows the user to review the therapy settings that were selected on the **V.A.C. VERAFLÓ™ Settings** screen.

4. Use + / - to adjust above or below values shown.

Select **Advanced Settings** to return to the **V.A.C. VERAFLÓ™ Therapy Settings** screen to make any required adjustments.

5. Select **OK** to initiate therapy and continue to the **SEAL CHECK™ Leak Detector** screen.

OR

6. Select **Cancel** to return to the **New Patient** screen.
Fill Assist Screens

These screens will display the status of the Fill Assist sequence.

1. Fill Assist (1) will begin to draw down the dressing to prepare the dressing seal to minimize solution leak potential. Once the V.A.C.ULTA™ Therapy Unit has reached target pressure and determined that the dressing air leaks are small enough to continue V.A.C. VERAFLO™ Therapy, the therapy unit will continue to the Fill Assist screen.

   **Seal Audio** - (Default = OFF) Audible tone used to find and repair leaks. Select to turn seal audio tone on or off.

   **Log** - Used to record disposable component change (page 150).

2. Select **Start / Stop** on the Fill Assist screen to begin delivering solution to the wound (2).

   During the use of Fill Assist it is possible to exceed the soak time for a solution. Consider elapsed time in comparison to the selected soak time while using this tool.

3. Monitor the wound as it fills with solution.
4. Select **Start / Stop** again to stop solution delivery when suitable fill volume has been delivered to the wound bed. *Overfilling wound may compromise dressing seals.*

5. Use +/- to adjust the fluid volume if required.

6. Select **OK (3)** to confirm the determined fluid volume as displayed on the **Fill Assist** screen and return to the **Home** screen (page 50). The therapy unit will then begin the soak phase. *If OK is not selected within 15 minutes of starting Fill Assist or within 15 minutes of stopping Fill Assist, the V.A.C.ULA™ Therapy Unit will transition to V.A.C.® Therapy phase and the Fill Assist volume will not be recorded.*

7. If wound has been over-filled, solution needs to be removed, or Fill Assist needs to be restarted, select **Reset** to remove solution from the wound and return to the **Fill Assist** screen.
This Home screen is the main screen displayed by the V.A.C.ULTA™ Therapy Unit during V.A.C. VERAFLO™ Therapy. It is used to access important information about the Therapy Status.

Therapy phase and status (ON, OFF or PAUSED) will be displayed in the status bar at the top of the screen. The current therapy phase will also appear under the icon of the therapy unit or above the dressing.

The following options are available from the Home screen:

**Therapy Settings** - Use to change current therapy settings.

**SEAL CHECK™ Leak Detector** - An on-screen bar graph will indicate leak level and an audible tone will sound if unit detects a significant leak (page 145).

**Information** - Use to view a summary of therapy history and current therapy settings (page 51).

**Start / Stop** - Use to start or stop therapy.

**Pause / Resume** - Use to pause or resume therapy.

**Help** - Use to access the V.A.C.ULTA™ Therapy Unit’s on-screen help features.

**Leak Detection** - If the therapy unit detects a leak in the system temporarily above the Leak Alarm threshold, the Home screen for V.A.C. VERAFLO™ Therapy will display a yellow box around the dressing. Refer to the instructions for use provided with the dressings for information on using excess drape material to seal any leak areas.

Refer to page 41 for a list of Common Touch Screen Buttons not described here.
Information Screens - V.A.C. VERAFLO™ Therapy

These screens will display the current therapy settings and a summary of therapy applied to the patient.

1. Select **Information** from the **Home** screen to continue to the **Therapy Summary** tab. Use this tab to review the Therapy Start Date, Therapy Time, V.A.C.* Time, Soak Time, Therapy Cycles and Instilled Volume. If the Log feature is used, the date and time for Canister Last Changed, Cassette Last Changed, Dressing Last Changed and Solution Last Changed will also be displayed.

2. Select **Current Settings** to continue to the **Current Settings** screen. Use this tab to review the current therapy settings.

3. Select **Change Settings** to continue to the **Confirm Settings** screen (page 47).

4. Select **Exit** to return to the **Home** screen for **V.A.C. VERAFLO™ Therapy**.
Stop V.A.C. VERAFLO™ Therapy Confirmation

1. If therapy is being provided, select Start / Stop from the Home screen to continue to the Stop Therapy Confirmation screen.

2. Select OK to stop therapy. Select Cancel to return to the Home screen without stopping therapy.

*Instilled fluid will be removed; ensure canister can hold the entire volume. Ensure tubing clamps are open and tubing is not kinked, collapsed or blocked.*

V.A.C. VERAFLO™ Therapy Paused

1. If therapy is being provided, select Pause / Resume from the Home screen to continue to the V.A.C. VERAFLO™ Therapy Pause screen.

2. Select OK to pause therapy. Select Cancel to return to the Home screen for V.A.C. VERAFLO™ Therapy without pausing therapy.

*Therapy can be paused for up to 15 minutes. This may exceed selected soak time. Consider this pause time and the selected soak time before pausing therapy.*
V.A.C. VERAFLÒ™ Therapy Alerts and Alarms

The following alerts and alarms may appear on the touch screen during V.A.C. VERAFLÒ™ Therapy.

Alerts and alarms are accompanied by a repeating audible tone.

Following initiation of therapy, if an audible tone is not heard when SEAL CHECK™ Leak Detector is displayed and Seal Audio tone is turned ON, the alarms may not be working properly. Contact KCI for more information. Alarms are intended to be heard when facing the therapy unit at a maximum of one meter away. If two or more alarm conditions are present, only the highest priority alarm will be displayed.

**Low Priority Alert Condition** - Displayed on the touch screen when the V.A.C.ULTA™ Therapy Unit detects a condition that requires attention. Alerts will be accompanied by a repeating audible tone approximately every 20 seconds (two beeps).

**Medium Priority Alarm Condition** - Displayed on the touch screen when the V.A.C.ULTA™ Therapy Unit detects a condition that requires prompt attention in order to ensure the prescribed therapy is being delivered. Alarms will be accompanied by a repeating audible tone approximately every two seconds (three beeps) and a flashing screen title.

Select **Seal Audio** to turn the audible tone ON.

Select **Help** for more information regarding alarm resolution.

*If alert or alarm conditions cannot be resolved, contact KCI.*
V.A.C. VERAFLO™ Therapy Blockage Alert

Low Priority Alert - This alert screen appears when the V.A.C.ULTA™ Therapy Unit has detected a potential blockage in the V.A.C.* Therapy line. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Ensure clamps on the V.A.C.* Therapy tubing on the V.A.C. VERAT.R.A.C.™ Pad or V.A.C. VERAT.R.A.C. DUO™ Tube Set and canister tubing are open.

3. Ensure tubing is not kinked, crimped, or blocked in any way.

4. If the V.A.C.* Therapy Blockage Alert remains after completing steps 2 and 3, lower the therapy unit and tubing to be level with or below the wound site. If the alert is resolved by lowering the unit, normal use may resume.

5. Select Reset to return to the Home screen.

6. Ensure therapy is ON by checking the status bar (page 50). If not, select Start / Stop to restart therapy.

The V.A.C.ULTA™ Therapy Unit will continue to attempt to apply therapy during this alert.

If alarm condition cannot be resolved, contact KCI.
V.A.C. VERAFLÒ™ Therapy Blockage Alarm (Therapy Interrupted)

Medium Priority Alarm - This alarm screen appears when a blockage is present in the V.A.C.* Therapy line. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select **Audio Pause** to silence alarm for two minutes during troubleshooting.

2. Ensure clamps on the V.A.C.* Therapy tubing on the V.A.C. VERAT.R.A.C.™ Pad or V.A.C. VERAT.R.A.C. DUO™ Tube Set and canister tubing are open.

3. Ensure tubing is not kinked, crimped, or blocked in any way.

4. If the **V.A.C.* Therapy Blockage Alarm (Therapy Interrupted)** remains after completing steps 2 and 3, lower the therapy unit and tubing to be level with or below the wound site. If the alarm is resolved by lowering the unit, normal use may resume.

5. Select **Reset** to return to the **Home** screen.

6. Ensure therapy is ON by checking the status bar (page 50). If not, select **Start / Stop** to restart therapy.

**Therapy unit remains on; however, negative pressure at the wound site may be below therapeutic value.**

**If alarm condition cannot be resolved, contact KCI.**

**Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.**
Medium Priority Alarm - This alarm screen appears when the canister is full and should be replaced. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select Audio Pause to silence alarm for two minutes during troubleshooting.

2. Check if canister is full by comparing the level of fluid to the graduated marks on the canister.

   ![Graduated Marks](image)

   A full canister is approximately 300 mL, 500 mL or 1000 mL depending on canister used. Canister release button will be flashing.

3. If canister is not full, select Reset to return to the Home screen.

4. If canister is full, change canister and select Reset on this screen to return to the Home screen. See the Changing the Canister section of this manual (page 34) for additional information.

5. Select Pause / Resume to restart therapy.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
V.A.C. VERAFLÔ™ Therapy Canister Not Engaged Alarm

Medium Priority Alarm - This alarm screen appears when the canister is not fully inserted and / or properly latched. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select **Audio Pause** to silence alarm for two minutes during troubleshooting.

2. Remove the canister by pressing the **Canister Release** button (page 18) on the unit.

3. Inspect the canister and V.A.C. ULTA™ Therapy Unit to ensure no foreign objects or debris interfere with the canister and therapy unit’s mating surfaces.

4. Ensure both seals are present and seated completely (page 19). If seals are missing or damaged, contact KCI.

5. Re-attach the canister to the V.A.C. ULTA™ Therapy Unit ensuring that the canister is fully engaged and latched (page 32). An audible click indicates that the canister is properly installed.

6. Select **Reset** to return to the **Home** screen.

7. Select **Pause / Resume** to restart therapy.

8. If this alarm continues to appear, repeat steps 2 - 7 with a new canister.

*If alarm condition cannot be resolved, contact KCI.*
V.A.C. VERAFLÒ™ Therapy Therapy Inactive Alarm

Medium Priority Alarm - This alarm screen appears when therapy (V.A.C. VERAFLÒ™ Therapy) has been off or paused for more than 15 minutes (with the unit powered on). This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select Audio Pause to silence alarm for two minutes during troubleshooting.

2. Select Reset to return to the Home screen.

3. Select Start / Stop to restart therapy.

4. If therapy is not desired, turn the V.A.C.ULTA™ Therapy Unit off by using the Power button on the front of the unit.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
V.A.C. VERAFLO™ Therapy Leak Alarm

Medium Priority Alarm - This alarm screen appears when a significant negative pressure leak has been detected. If this alarm is not resolved in three minutes, therapy will be interrupted. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select **Audio Pause** to silence alarm for two minutes during troubleshooting.

2. Ensure connector between dressing tubing and canister tubing is properly locked.

3. Ensure canister is fully engaged. (See **Canister Not Engaged Alarm**, page 57).

4. Select **SEAL CHECK™** to access the SEAL CHECK™ Leak Detector. Refer to the **SEAL CHECK™ Leak Detector** section (page 145) of this manual for details on how to use the SEAL CHECK™ Leak Detector and how to repair leaks.

5. Once the leak is resolved using the SEAL CHECK™ Leak Detector, select **Exit** on the **SEAL CHECK™ Leak Detector** screen to return to the **V.A.C. VERAFLO™ Therapy Leak Alarm** screen.

6. Select **Reset** to return to the **Home** screen.

7. Ensure therapy is ON by checking the Status Bar (page 50). If not, select **Start / Stop** to restart therapy.

If this alarm is not resolved within three minutes, the V.A.C. VERAFLO™ Therapy Leak Alarm (Therapy Interrupted) will appear and therapy will stop.

Refer to V.A.C. VERAFLO™ Therapy Leak Alarm (Therapy Interrupted) section of this manual (page 60) for procedures to restart therapy.
Medium Priority Alarm - This alarm screen appears when a detected negative pressure leak has not been resolved and therapy has been interrupted. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select Audio Pause to silence alarm for two minutes during troubleshooting.

2. Ensure connector between dressing tubing and canister tubing is properly locked.

3. Ensure canister is fully engaged. (See Canister Not Engaged Alarm, page 57).

4. Select Reset to return to the Home screen.

5. Restart therapy by selecting Start / Stop.

6. Select SEAL CHECK™ to access the SEAL CHECK™ Leak Detector. Refer to the SEAL CHECK™ Leak Detector section (page 145) of this manual for details on how to use the SEAL CHECK™ Leak Detector and how to repair leaks.

7. Once the leak is resolved using the SEAL CHECK™ Leak Detector, select Exit on the SEAL CHECK™ Leak Detector screen to return to the Home screen.

If the leak condition is not resolved, an alarm screen will reappear after several minutes.

If alarm condition cannot be resolved, contact KCI.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
Medium Priority Alarm - This alarm screen appears when the V.A.C.ULTA™ Therapy Unit has not reached the target therapy negative pressure setting and negative pressure at the wound may be below set pressure, potentially compromising therapeutic benefits. This alarm is accompanied by a repeating audible tone.

To resolve this alarm:

1. Select Audio Pause to silence alarm for two minutes during troubleshooting.

2. Ensure clamps on the V.A.C.® Therapy tubing on the V.A.C. VERAT.R.A.C.™ Pad or V.A.C. VERAT.R.A.C. DUO™ Tube Set and canister tubing are open.

3. Ensure tubing is not kinked, crimped, or blocked in any way.

4. If the V.A.C.® Therapy Low Pressure Alarm (Therapy Interrupted) remains after completing steps 2 and 3, lower the therapy unit and tubing to be level with or below the wound site. If the alarm is resolved by lowering the unit, normal use may resume.

5. Select Reset to return to the Home Screen.

6. Ensure therapy is ON by checking the status bar (page 50). If not, select Start / Stop to restart therapy.

Therapy unit remains on; however, negative pressure at the wound site may be below therapeutic value.

If alert condition cannot be resolved, contact KCI.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
V.A.C. VERAFLO™ Therapy V.A.C. VERALINK™ Not Engaged Alert

Low Priority Alert - This alert screen appears when the V.A.C. VERALINK™ Cassette is not fully seated and / or properly latched. This alert will be accompanied by a repeating audible tone.

During V.A.C. VERAFLO™ Therapy the V.A.C. ULTA™ Therapy Unit will transition to the Soak Phase upon initiation of this alert and will continue to the V.A.C.® Therapy Phase before repeating the cycle. If V.A.C. VERALINK™ Cassette is correctly engaged prior to the completion of the V.A.C.® Therapy Phase, the V.A.C. VERAFLO™ Therapy cycle will not be interrupted.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Remove the V.A.C. VERALINK™ Cassette from the unit by pushing down on the cassette latch release tab (page 28).

3. Inspect the V.A.C. VERALINK™ Cassette and the V.A.C. ULTA™ Therapy Unit to ensure no foreign objects or debris interfere with the cassette and the therapy unit connection points.

4. Ensure the cassette's pivot connection (on the end with the tubing spike) is securely engaged within the pivot slot on the therapy unit (page 28).

5. Re-attach the V.A.C. VERALINK™ Cassette to the therapy unit ensuring that the cassette is fully engaged and latched (page 28). An audible click indicates that the cassette is properly installed.

6. Select Reset to return to the Home screen.

7. Ensure therapy is ON by checking the status bar (page 50). If not, select Start / Stop to restart therapy.

8. If this alert condition continues to appear, repeat steps 2 - 7 with a new V.A.C. VERALINK™ Cassette.

If alert condition cannot be resolved, contact KCI.
V.A.C. VERAFLO™ Therapy Solution Bag / Bottle Empty Alert

**Low Priority Alert** - This alert screen appears when there is no instillation fluid in the solution bag / bottle. This alert will be accompanied by a repeating audible tone.

*During V.A.C. VERAFLO™ Therapy the V.A.C.UL TA™ Therapy Unit will transition to the Soak Phase upon initiation of this alert and will continue to the V.A.C.® Therapy Phase before repeating the cycle. If solution bag / bottle is changed prior to the completion of the V.A.C.® Therapy Phase, the V.A.C. VERAFLO™ Therapy cycle will not be interrupted.*

To resolve this alert:

1. Select **Audio Pause** to silence alert for two minutes during troubleshooting.

2. Remove empty solution bag / bottle from V.A.C. VERALINK™ Cassette.

3. Attach new solution bag / bottle. Refer to **Hang Solution Container Bag / Bottle** section of this manual (page 30) for more information.

4. Place new bag / bottle on the adjustable solution container hanger arm (page 30).

5. Select **Log** to enter the solution bag / bottle change. Refer to the **Log** screen section (page 150) for more information.

6. Select **Reset** to return to the **Home** screen.

7. Ensure therapy is ON by checking the status bar (page 50). If not, select **Start / Stop** to restart therapy.
V.A.C. VERAFLÒ™ Therapy Fill Assist Inactive Alert

**Low Priority Alert** - This alert screen appears if the Fill Assist volume has not been accepted within 15 minutes of using Fill Assist. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select **Audio Pause** to silence alert for two minutes during troubleshooting.

2. Select **Reset** to return to the **Home** screen.

3. Select **Therapy Settings** on the **Home** screen (page 50).

4. Reconfigure therapy (page 46).

*If alert condition cannot be resolved, contact KCI.*
V.A.C. VERAFLO™ Therapy Pressure Deviation Alarm (Therapy Interrupted)

Medium Priority Alarm - This alarm screen appears when the wound site positive pressure has exceeded its allowable limits. This alarm will be accompanied by a repeating audible tone.

During V.A.C. VERAFLO™ Therapy the V.A.C.ULTA™ Therapy Unit will transition to the Soak Phase upon initiation of this alarm and will continue to the V.A.C.* Therapy Phase before repeating the cycle. If pressure deviation condition is resolved prior to completion of the V.A.C.* Therapy Phase, the V.A.C. VERAFLO™ Therapy cycle will not be interrupted.

To resolve this alarm:

1. Select Audio Pause to silence alarm for two minutes during troubleshooting.

2. Ensure clamps on the V.A.C. VERAT.R.A.C.™ Pad or the V.A.C. VERAT.R.A.C. DUO™ Tube Set and V.A.C. VERALINK™ Cassette tubing are open.

3. Ensure that the tubing is not kinked, crimped or blocked in any way.

4. If the V.A.C. VERAFLO™ Therapy Pressure Deviation Alarm (Therapy Interrupted) remains after completing steps 2 and 3, check patient positioning or any external compression devices that may impede flow. Remove external compression device.

5. Select Reset to return to the Home screen.

6. Ensure therapy is ON by checking the status bar (page 50). If not, select Start / Stop to restart therapy.

If alarm condition cannot be resolved, contact KCI.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
V.A.C. VERAFLØ™ Therapy Instill Tube Blockage Alert (Therapy Interrupted)

Low Priority Alert - This alert screen appears when a blockage is present in the instillation line of the V.A.C. VERAT.R.A.C.™ Pad or V.A.C. VERAT.R.A.C. DUO™ Tube Set. This alert will be accompanied by a repeating audible tone.

*During V.A.C. VERAFLØ™ Therapy the V.A.C.UL TA™ Therapy Unit will transition to the Soak Phase upon initiation of this alert and will continue to the V.A.C.® Therapy Phase before repeating the cycle. If blockage is resolved prior to completion of the V.A.C.® Therapy Phase, the V.A.C. VERAFLØ™ Therapy cycle will not be interrupted.*

To resolve this alert:

1. Select **Audio Pause** to silence alert for two minutes during troubleshooting.

2. Ensure clamps on the V.A.C. VERAT.R.A.C.™ Pad or V.A.C. VERAT.R.A.C. DUO™ Tube Set and V.A.C. VERALINK™ Cassette are open.

3. Ensure that the tubing is not kinked, crimped, or blocked in any way.

4. Ensure the V.A.C. VERALINK™ Cassette is fully engaged and latched. See the **Attaching the V.A.C. VERALINK™ Cassette to the V.A.C.UL TA™ Therapy Unit** section (page 28) of this manual for more information.

5. Ensure that the instillation solution in the V.A.C. VERALINK™ Cassette tubing is still liquid and flows freely. If the solution has degraded to a thicker consistency, change any or all of the following:

   - V.A.C. VERALINK™ Cassette
   - V.A.C. VERAT.R.A.C.™ Pad or V.A.C. VERAT.R.A.C. DUO™ Tube Set
   - Solution bag / bottle

6. If the V.A.C. VERAFLØ™ Therapy Instill Tube Blockage Alert remains after completing steps 2 - 5, check patient positioning or any external compression devices that may impede flow. If applicable, remove external compression device.

7. Select **Reset** to return to the **Home** screen.

*Alert screen will clear when the blockage is corrected.*
8. Ensure therapy is ON by checking the status bar (page 50). If not, select **Start / Stop** to restart therapy.

*If alarm condition cannot be resolved, contact KCI.*

**!**

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
V.A.C. VERAFLÔ™ Therapy Battery Low Alert

Low Priority Alert - This alert screen appears approximately two hours before the battery power level is too low to support continued operation of the V.A.C.ULTA™ Therapy Unit. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select Audio Pause to silence alarm for two minutes during troubleshooting.

2. Connect the therapy unit to a wall outlet using the KCI supplied power supply to recharge battery. An amber light at the bottom of the touch screen and a battery charge icon indicate the unit is charging. Refer to the Charge Battery section of this manual (page 23) for more information.

   Once the V.A.C.ULTA™ Therapy Unit is plugged into a wall outlet, the Battery Low Alert screen will automatically clear.

   OR

3. Select Reset to return to the Home screen.

   Therapy continues.
V.A.C. VERAFLÒ™ Therapy Battery Critical Alarm

Medium Priority Alarm - This alarm screen appears approximately 30 minutes before the battery power level is too low to support continued operation of the V.A.C.ULTA™ Therapy Unit. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select Audio Pause to silence alarm for two minutes during troubleshooting.

2. Connect the therapy unit to a wall outlet using KCI supplied power supply to recharge battery. An amber light at the bottom of the touch screen and a battery charge icon indicates the unit is charging. Refer to the Charge Battery section of this manual (page 23) for more information.

3. If the Battery Critical Alarm screen does not automatically clear, select Reset to return to the Home screen.

4. Ensure therapy is ON by checking the status bar (page 50). If not, select Start / Stop to restart therapy.

V.A.C.® Therapy continues and V.A.C. VERAFLÒ™ Therapy transitions to V.A.C.® Therapy phase after approximately five minutes; however, if this alarm is not resolved within approximately thirty minutes, therapy will be interrupted.

The V.A.C.ULTA™ Therapy must be plugged into a wall outlet in order to continue therapy.

Alarm logs and settings are not lost in the case of a total power loss or if the unit is power cycled (turned off then back on).

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
Battery Exhausted Alarm

Medium Priority Alarm - This alarm screen appears when the battery power level is too low to power on the V.A.C.UTA™ Therapy Unit.

To resolve this alarm:

1. Connect the therapy unit to a wall outlet using KCI supplied power supply to recharge battery. An amber light at the bottom of the touch screen and a battery charge icon indicates the unit is charging. Refer to the Charge Battery section of this manual (page 23) for more information.

2. Power the V.A.C.UTA™ Therapy Unit on and initiate therapy. Refer to the Power the V.A.C.UTA™ Therapy Unit On or Off section of this manual (page 42) for more information.
V.A.C. VERAFL™ Therapy Internal Temperature Alert

Low Priority Alert - This alert screen appears when the internal temperature of the V.A.C.ULTA™ Therapy Unit is outside its specified limits. This alert will be accompanied by a repeating audible tone.

Therapy will continue while this alert is active. The touch screen will be turned off after five minutes of inactivity. The screen will illuminate when touched. Battery charging is stopped.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Move the therapy unit to an environment with an operational temperature range as detailed in the Specifications section of this manual (page 194).

3. Select Reset to return to the Home screen.

Therapy continues.

If alarm condition cannot be resolved, contact KCI.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
Medium Priority Alarm - This alarm screen appears when there is a system fault within the V.A.C.ULTA™ Therapy Unit after it has been powered on. Several different types of system errors may occur. A number will appear next to Error Code that represents the diagnostic code of the system fault. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select Audio Pause to silence alarm for two minutes during troubleshooting.

2. Record the Error Code number.

3. Power the unit off and then on using the Power button on the front of the unit (page 18).

If alarm condition cannot be resolved, contact KCI.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
System Error Alarm (at Power On)

Medium Priority Alarm - This alarm screen appears when there is a system fault within the V.A.C.ULTA™ Therapy Unit while the unit is powering on. “00000001” represents the diagnostic code of the system fault. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Record the Error Code number (00000001).

2. Power the unit off and then on using the Power button on the front of the unit (page 18).

If alarm condition cannot be resolved, contact KCI.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
Utilities Tab - V.A.C. VERAFLO™ Therapy

Use the Utilities Tab screen to set preferences for the V.A.C.ULTA™ Therapy Unit. Certain selections are available no matter what therapy is active. Those selections are discussed in the Utilities Tab chapter. Selections that are unique to the selected therapy are detailed below.

The following options are available from the Utilities Tab Home screen:

**SEAL CHECK™ Leak Detector** - An on-screen bar graph will indicate leak level and an audible tone will sound if unit detects a significant leak (page 146).

**Dressing Soak** - Use to soak the dressing with solution in preparation for a dressing change (page 75).

**Test Cycle** - Use to complete an abbreviated V.A.C. VERAFLO™ Therapy cycle. Each phase of the cycle will be tested to ensure system is set up and functioning correctly (page 79).

**Help** - Use to access the V.A.C.ULTA™ Therapy Unit’s on-screen help features.
Dressing Soak

Use to soak the dressing with solution in preparation for a dressing change.

If the Dressing Soak tool is available for selection, the Dressing Soak icon on the Home screen or Utilities Tab (V.A.C. VERAFLÓ™ Therapy and V.A.C.® Therapy only) will be blue.

Dressing Soak selected while therapy is idle:

1. Ensure that both the V.A.C.® canister tubing and installation line are properly connected.

2. Ensure that all four tubing clamps are open.

3. Ensure that the V.A.C. VERALINK™ Cassette is properly installed (page 28).

4. Ensure that the canister has adequate capacity remaining for the dressing change.

5. Select Dressing Soak from the Home screen or Utilities Tab to continue to the Dressing Soak screen.

6. Select the target Dressing Soak Volume (mL).

7. Select the target Dressing Soak Time (minutes).

8. Select OK to confirm settings and return to the Home screen or Utilities Tab.

9. The V.A.C. ULTRA™ Therapy Unit will complete the Instill, Soak, and fluid removal phases. Therapy phase will be displayed in the status bar (page 50) at the top of the screen. The current therapy status will also appear under the icon of the therapy unit along with time or fluid amount (during the Instill phase) remaining.

10. Once the Dressing Soak fluid removal phase is complete, the dressing can be removed.

11. Select Exit to return to the Home screen or Utilities Tab.

Refer to the appropriate dressing Instructions for Use for safety information and procedures to change the dressing.
Dressing Soak selected during Instill Phase:

1. Select **Dressing Soak** from the **Home** screen or **Utilities Tab** to continue to the **Dressing Soak** screen.

2. Ensure that both the V.A.C.® canister tubing and instillation line are properly connected.

3. Ensure that all four tubing clamps are open.

4. Ensure that the canister has adequate capacity remaining for the dressing change.

5. Select the target **Dressing Soak Time (minutes)**.

6. Select **OK** to confirm settings and return to the **Home** screen or **Utilities Tab**.

7. The V.A.C.ULTA™ Therapy Unit will complete the Instill, Soak, and fluid removal phases. Therapy will be displayed in the status bar (page 50) at the top of the screen. The current therapy status will also appear under the icon of the therapy unit along with time or fluid amount (during the **Instill** phase) remaining.

8. Once the Dressing Soak fluid removal phase is complete, the dressing can be removed.

9. Select **Exit** to return to the **Home** screen or **Utilities Tab**.

> Refer to the appropriate dressing Instructions for Use for safety information and procedures to change the dressing.
Dressing Soak selected during Soak Phase:

1. Select Dressing Soak from the Home screen or Utilities Tab to begin Dressing Soak.

2. Ensure that both the V.A.C.® canister tubing and instillation line are properly connected.

3. Ensure that all four tubing clamps are open.

4. Ensure that the canister has adequate capacity remaining for the dressing change.

5. The V.A.C.ULTRA™ Therapy Unit will complete the Soak and fluid removal phases. Therapy will be displayed in the status bar (page 50) at the top of the screen. The current therapy status will also appear under the icon of the therapy unit along with time or fluid amount (during the Instill phase) remaining.

6. Once the Dressing Soak fluid removal phase is complete, the dressing can be removed.

7. Select Exit to return to the Home screen or Utilities Tab.

Refer to the appropriate dressing Instructions for Use for safety information and procedures to change the dressing.
Dressing Soak selected during V.A.C.® Therapy Phase:

1. Ensure that the instillation line is properly connected.

2. Ensure that all four tubing clamps are open.

3. Ensure that the V.A.C. VERALINK™ Cassette is properly installed (page 28).

4. Ensure that the canister has adequate capacity remaining for the dressing change.

5. Select Dressing Soak from the Home screen or Utilities Tab to continue to the Dressing Soak screen.

6. Select the target Dressing Soak Volume (mL).

7. Select the target Dressing Soak Time (minutes).

8. Select OK to confirm settings and return to the Home screen or Utilities Tab.

9. The V.A.C.ULTA™ Therapy Unit will complete the Instill, Soak, and fluid removal phases. Therapy phase will be displayed in the status bar (page 50) at the top of the screen. The current therapy status will also appear under the icon of the therapy unit along with time or fluid amount (during the Instill phase) remaining.

10. Once the Dressing Soak fluid removal phase is complete, the dressing can be removed.

11. Select Exit to return to the Home screen or Utilities Tab.

Refer to the appropriate dressing Instructions for Use for safety information and procedures to change the dressing.
Test Cycle

Use to complete an abbreviated V.A.C. VERAFLÓ™ Therapy cycle. Each phase of the cycle will be tested to ensure system is set up and functioning correctly.

1. Ensure that both the V.A.C.® Canister tubing and instillation line are properly connected (page 31).
2. Ensure that all four tubing clamps are open (pages 31 and 33).
3. Ensure the V.A.C. VERALINK™ Cassette is properly installed (page 28).
4. Ensure that the canister is properly installed (page 32).
5. Ensure solution bag / bottle is properly installed (page 29).
6. If unit has never been configured for V.A.C. VERAFLÓ™ Therapy, configure unit as described in the V.A.C. VERAFLÓ™ Therapy Configuration - Overview section (pages 44 - 47).

Test Cycle is only available while configured for V.A.C. VERAFLÓ™ Therapy.

If the user does not select any therapy settings, the V.A.C. ULTA™ Therapy Unit will default to factory settings.

7. Select Test Cycle from Utilities screen (page 74).
8. Once Test Cycle is complete, select EXIT to go to the V.A.C.® Therapy phase.
V.A.C.® Therapy Configuration - Default Settings Overview

The following flow chart shows the basic steps required to configure V.A.C.® Therapy using the default settings. Refer to the following pages for detailed information about individual screens and options.

**Required for V.A.C.® Therapy:**
- Canister
- V.A.C.® Dressing

Press and hold Power button until light comes on.

In order to use the Dressing Soak tool, a V.A.C. VERALINK™ Cassette must be installed (page 28).

Select V.A.C.® Therapy (page 42)

Select OK to accept default settings.

Drawdown begins.

Screen shots shown above are for representation only. Refer to the page numbers listed for a more detailed view and more detailed information.

Settings displayed will vary depending on settings defined by user.
V.A.C.® Therapy Configuration - Advanced User Defined Settings Overview

The following flow chart shows the basic steps required to configure V.A.C.® Therapy with User defined settings. Refer to the following pages for detailed information about individual screens and options.

Press and hold Power button until light comes on.

Required for V.A.C.® Therapy:
- Canister
- V.A.C.® Dressing

In order to use the Dressing Soak tool, a V.A.C. VERALINK™ Cassette must be installed (page 28).

Select V.A.C.® Therapy (page 42).

Select Advanced Settings. Configure V.A.C.® Therapy as prescribed (page 83). Select OK to continue to the Confirm Settings screen.

Select OK to accept settings.

Drawdown begins.

Screen shots shown above are for representation only. Refer to the page numbers listed for a more detailed view and more detailed information.

Settings displayed will vary depending on settings defined by user.

Home screen - V.A.C.® Therapy
This screen allows the user to configure the V.A.C.® ULTRA™ Therapy Unit to deliver V.A.C.® Therapy:

- **Target Pressure (mmHg)** - *(Default = 125 mmHg)* Prescribed negative pressure level for V.A.C.® Therapy. Target Pressure can be set from 25 - 200 mmHg in 25 mmHg increments.

- **Intensity** - *(Default = Low)* Related to the time it takes to reach the target pressure after the initiation of therapy. The lower the intensity setting, the slower the target pressure will be reached. It is recommended that new patients begin therapy at the lowest intensity setting as this allows for slower increase of negative pressure once the foam is compressed in the wound. The intensity can remain at the minimum setting throughout the entire length of treatment, if desired.

- **V.A.C.® Therapy Mode** - *(Default = Continuous)* Available modes include Continuous and DPC. Continuous provides constant negative pressure at selected Target Pressure. DPC provides negative pressure between preset low pressure (25 mmHg) and selected Target Pressure.

- **Cycle Rise Time** - *(Default = 3 minutes)* Time used to transition from the preset low pressure (25 mmHg) to the selected target pressure while using DPC. Cycle Rise Time can be set from one minute to 10 minutes in one minute increments.

- **Cycle Fall Time** - *(Default = 3 minutes)* Time used to transition from the selected target pressure to the preset low pressure (25 mmHg) while using DPC. Cycle Fall Time can be set from one minute to 10 minutes in one minute increments.

1. Select desired value by selecting or sliding finger / stylus along bar. Use + / - to adjust above or below values shown.

Select **Restore Defaults** to reset therapy settings to the default values.
2. Once all settings have been entered, select OK to continue to the Confirm Settings screen. This screen allows the user to review the therapy settings that were selected on the V.A.C.® Therapy Settings screen.

3. Use +/- to adjust above or below values shown.

Select Advanced Settings to return to the V.A.C.® Therapy Settings screen to make any required adjustments.

4. Select OK to initiate therapy and continue to the SEAL CHECK™ Leak Detector screen for V.A.C.® Therapy.

OR

5. Select Cancel to return to the Choose Therapy screen.
Home Screen - V.A.C.® Therapy

This Home screen is the main screen displayed by the V.A.C.ULTA™ Therapy Unit during V.A.C.® Therapy. It is used to access important information about the status of therapy.

Therapy mode and status (ON or OFF) will be displayed in the status bar at the top of the screen. The current therapy pressure will also appear above the icon of the dressing.

The following options are available from the Home screen for V.A.C.® Therapy:

Therapy Settings - Use to change current therapy settings.

SEAL CHECK™ Leak Detector - An on-screen bar graph will indicate leak level and an audible tone will sound if unit detects a significant leak (page 145).

Information - Use to view a summary of therapy history and current therapy settings (page 86).

Start / Stop - Use to start or stop therapy.

Help - Use to access to the V.A.C.ULTA™ Therapy Unit’s on-screen help features.

Leak Detection - If the therapy unit detects a leak in the system temporarily above the Leak Alarm threshold, the Home screen for V.A.C.® Therapy will display a yellow box around the dressing. Refer to the instructions for use provided with the dressings for information on using excess drape material to seal any leak areas.

Refer to page 41 for a list of Common Touch Screen Buttons not described here.
Information Screens - V.A.C.® Therapy

These screens will display the current therapy settings and a summary of therapy applied to the patient.

1. Select Information from the Home screen to continue to the Therapy Summary tab. Use this tab to review the Therapy Start Date and Therapy Time. If the Log feature is used, the date and time for Canister Last Changed, Cassette Last Changed, Dressing Last Changed and Solution Last Changed will also be displayed.

2. Select Current Settings to continue to the Current Settings screen. Use this tab to review the current therapy settings.

3. Select Change Settings to continue to the Confirm Settings screen (page 84).

4. Select Exit to return to the Home screen for V.A.C.® Therapy.
V.A.C.® Therapy Alerts and Alarms

The following alerts and alarms may appear on the touch screen during V.A.C.® Therapy.

Alerts and alarms are accompanied by a repeating audible tone.

Following initiation of therapy, if an audible tone is not heard when SEAL CHECK™ Leak Detector is displayed and Seal Audio tone is turned ON, the alarms may not be working properly. Contact KCI for more information. Alarms are intended to be heard when facing the therapy unit at a maximum of one meter away. If two or more alarm conditions are present, only the highest priority alarm will be displayed.

**Low Priority Alert Condition** - Displayed on the touch screen when the V.A.C.ULTA™ Therapy Unit detects a condition that requires attention. Alerts will be accompanied by a repeating audible tone approximately every 20 seconds (two beeps).

**Medium Priority Alarm Condition** - Displayed on the touch screen when the V.A.C.ULTA™ Therapy Unit detects a condition that requires prompt attention in order to ensure the prescribed therapy is being delivered. Alarms will be accompanied by a repeating audible tone approximately every two seconds (three beeps) and a flashing screen title.

Select **Seal Audio** to turn the audible tone ON.

Select **Help** for more information regarding alarm resolution.

*If alarm conditions cannot be resolved, contact KCI.*
V.A.C.® Therapy Blockage Alert

Low Priority Alert - This alert screen appears when the V.A.C.ULTA™ Therapy Unit has detected a potential blockage. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Ensure clamps on the V.A.C.® Therapy tubing on the SENSAT.R.A.C.™ Pad and canister tubing are open.

3. Ensure tubing is not kinked, crimped, or blocked in any way.

4. If the V.A.C.® Therapy Blockage Alert remains after completing steps 2 and 3, lower the therapy unit and tubing to be level with or below the wound site. If the alert is resolved by lowering the unit, normal use may resume.

5. Select Reset to return to the Home screen.

6. Ensure therapy is ON by checking the status bar (page 85). If not, select Start / Stop to restart therapy.

The V.A.C.ULTA™ Therapy Unit will continue to attempt to apply therapy during this alert.

If alarm condition cannot be resolved, contact KCI.
V.A.C.® Therapy Blockage Alarm (Therapy Interrupted)

Medium Priority Alarm - This alarm screen appears when a blockage is present in the V.A.C.® Therapy line. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select Audio Pause to silence alarm for two minutes during troubleshooting.

2. Ensure clamps on the V.A.C.® Therapy tubing on the SENSAT.R.A.C.™ Pad and canister tubing are open.

3. Ensure tubing is not kinked, crimped, or blocked in any way.

4. If the V.A.C.® Therapy Blockage Alarm (Therapy Interrupted) remains after completing steps 2 and 3, lower the therapy unit and tubing to be level with or below the wound site. If the alarm is resolved by lowering the unit, normal use may resume.

5. Select Reset to return to the Home screen.

6. Ensure therapy is ON by checking the status bar (page 85). If not, select Start / Stop to restart therapy.

Therapy unit remains on; however, negative pressure at the wound site may be below therapeutic value.

If alarm condition cannot be resolved, contact KCI.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
V.A.C.® Therapy Canister Full Alarm (Therapy Interrupted)

**Medium Priority Alarm** - This alarm screen appears when the canister is full and should be replaced. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select **Audio Pause** to silence alarm for two minutes during troubleshooting.

2. Check if canister is full by comparing the level of fluid to the graduated marks on the canister.

   ![Graduated Marks](image)

   *A full canister is approximately 300 mL, 500 mL or 1000 mL depending on canister used. Canister release button will be flashing.*

3. If canister is not full, select **Reset** to return to the **Home** screen.

4. If canister is full, change canister and select **Reset** on this screen to return to the **Home** screen. See the **Changing the Canister** section of this manual (page 34) for additional information.

5. Select **Start / Stop** to restart therapy.

*Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.*
V.A.C.® Therapy Canister Not Engaged Alarm

Medium Priority Alarm - This alarm screen appears when the canister is not fully inserted and / or properly latched. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select Audio Pause to silence alarm for two minutes during troubleshooting.

2. Remove the canister by pressing the Canister Release button (page 18) on the unit.

3. Inspect the canister and V.A.C.ULTA™ Therapy Unit to ensure no foreign objects or debris interfere with the canister and therapy unit’s mating surfaces.

4. Ensure both seals are present and seated completely (page 19). If seals are missing or damaged, contact KCI.

5. Re-attach the canister to the V.A.C.ULTA™ Therapy Unit ensuring that the canister is fully engaged and latched (page 32). An audible click indicates that the canister is properly installed.

6. Select Reset to return to the Home screen.

7. Select Start / Stop to restart therapy.

8. If this alarm continues to appear, repeat steps 2 - 7 with a new canister.

If alarm condition cannot be resolved, contact KCI.
V.A.C.® Therapy Therapy Inactive Alarm

Medium Priority Alarm - This alarm screen appears when therapy (V.A.C.® Therapy) has been off or paused for more than 15 minutes (with the unit powered on). This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select Audio Pause to silence alarm for two minutes during troubleshooting.

2. Select Reset to return to the Home screen.

3. Select Start / Stop to restart therapy.

4. If therapy is not desired, turn the V.A.C.ULTA™ Therapy Unit off by using the Power button on the front of the unit.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
V.A.C.® Therapy Leak Alarm

Medium Priority Alarm - This alarm screen appears when a significant negative pressure leak has been detected. If this alarm is not resolved in three minutes, therapy will be interrupted. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select Audio Pause to silence alarm for two minutes during troubleshooting.

2. Ensure connector between dressing tubing and canister tubing is properly locked.

3. Ensure canister is fully engaged. (See Canister Not Engaged Alarm, page 91).

4. Select SEAL CHECK™ to access the SEAL CHECK™ Leak Detector. Refer to the SEAL CHECK™ Leak Detector section (page 145) of this manual for details on how to use the SEAL CHECK™ Leak Detector and how to repair leaks.

5. Once the leak is resolved using the SEAL CHECK™ Leak Detector, select Exit on the SEAL CHECK™ Leak Detector screen to return to the V.A.C.® Therapy Leak Alarm screen.

6. Select Reset to return to the Home screen.

7. Ensure therapy is ON by checking the Status Bar (page 85). If not, select Start / Stop to restart therapy.

If this alarm is not resolved within three minutes, the V.A.C.® Therapy Leak Alarm (Therapy Interrupted) will appear and therapy will stop.

Refer to V.A.C.® Therapy Leak Alarm (Therapy Interrupted) section of this manual (page 94) for procedures to restart therapy.
V.A.C.® Therapy Leak Alarm (Therapy Interrupted)

Medium Priority Alarm - This alarm screen appears when a detected negative pressure leak has not been resolved and therapy has been interrupted. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select Audio Pause to silence alarm for two minutes during troubleshooting.

2. Ensure connector between dressing tubing and canister tubing is properly locked.

3. Ensure canister is fully engaged. (See Canister Not Engaged Alarm, page 91).

4. Select Reset to return to the Home screen.

5. Restart therapy by selecting Start / Stop.

6. Select SEAL CHECK™ to access the SEAL CHECK™ Leak Detector. Refer to the SEAL CHECK™ Leak Detector section (page 145) of this manual for details on how to use the SEAL CHECK™ Leak Detector and how to repair leaks.

7. Once the leak is resolved using the SEAL CHECK™ Leak Detector, select Exit on the SEAL CHECK™ Leak Detector screen to return to the Home screen.

If the leak condition is not resolved, an alarm screen will reappear after several minutes.

If alarm condition cannot be resolved, contact KCI.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
**V.A.C.® Therapy Low Pressure Alarm (Therapy Interrupted)**

**Medium Priority Alarm** - This alarm screen appears when the V.A.C.ULTA™ Therapy Unit has not reached the target therapy negative pressure setting and negative pressure at the wound may be below set pressure, potentially compromising therapeutic benefits. This alarm is accompanied by a repeating audible tone.

To resolve this alarm:

1. Select **Audio Pause** to silence alarm for two minutes during troubleshooting.
2. Ensure clamps on the V.A.C.® Therapy tubing on the SENSAT.R.A.C.™ Pad and canister tubing are open.
3. Ensure tubing is not kinked, crimped, or blocked in any way.
4. If the **V.A.C.® Therapy Low Pressure Alarm (Therapy Interrupted)** remains after completing steps 2 and 3, lower the therapy unit and tubing to be level with or below the wound site. If the alarm is resolved by lowering the unit, normal use may resume.
5. Select **Reset** to return to the **Home Screen**.
6. Ensure therapy is ON by checking the status bar (page 85). If not, select **Start / Stop** to restart therapy.

**Therapy unit remains on; however, negative pressure at the wound site may be below therapeutic value.**

**If alarm condition cannot be resolved, contact KCI.**

**Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours.** See the **Safety Information Sheet** provided with the individual dressing for further information.
V.A.C.® Therapy V.A.C. VERALINK™ Not Engaged Alert

Low Priority Alert - This alert screen appears when the V.A.C. VERALINK™ Cassette is not fully seated and / or properly latched. This alert will be accompanied by a repeating audible tone.

*The V.A.C.ULTA™ Therapy Unit will continue to attempt to apply therapy during this alert.*

To resolve this alert:

1. Select **Audio Pause** to silence alert for two minutes during troubleshooting.

2. Remove the V.A.C. VERALINK™ Cassette from the unit by pushing down on the cassette latch release tab (page 28).

3. Inspect the V.A.C. VERALINK™ Cassette and the V.A.C.ULTA™ Therapy Unit to ensure no foreign objects or debris interfere with the cassette and the therapy unit connection points.

4. Ensure the cassette’s pivot connection (on the end with the tubing spike) is securely engaged within the pivot slot on the therapy unit (page 28).

5. Re-attach the V.A.C. VERALINK™ Cassette to the therapy unit ensuring that the cassette is fully engaged and latched (page 28). An audible click indicates that the cassette is properly installed.

*Once the V.A.C. VERALINK™ Cassette is properly installed, the V.A.C. VERALINK™ Not Engaged Alert screen will automatically clear.*

OR

6. Select **Reset** to return to the **Home** screen.

7. Ensure therapy is ON by checking the status bar (page 85). If not, select **Start / Stop** to restart therapy.

8. If this alert condition continues to appear, repeat steps 2 - 7 with a new V.A.C. VERALINK™ Cassette.

*If alert condition cannot be resolved, contact KCI.*
**V.A.C.® Therapy Solution Bag / Bottle Empty Alert**

**Low Priority Alert** - This alert screen appears when there is no instillation fluid in the solution bag / bottle. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select **Audio Pause** to silence alert for two minutes during troubleshooting.

2. Remove empty solution bag / bottle from V.A.C. VERALINK™ Cassette.

3. Attach new solution bag / bottle. Refer to **Hang Solution Container Bag / Bottle** section of this manual (page 30) for more information.

4. Place new bag / bottle on the adjustable solution container hanger arm (page 30).

5. Select **Log** to enter the solution bag / bottle change. Refer to the **Log** screen section (page 151) for more information.

6. Select **Reset** to return to the **Home** screen.

7. Ensure therapy is ON by checking the status bar (page 85). If not, select **Start / Stop** to restart therapy.
V.A.C.® Therapy Pressure Deviation Alarm (Therapy Interrupted)

Medium Priority Alarm - This alarm screen appears when the wound site positive pressure has exceeded its allowable limits. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select **Audio Pause** to silence alarm for two minutes during troubleshooting.

2. Ensure clamps on the V.A.C. VERAT.R.A.C.™ Pad or the V.A.C. VERAT.R.A.C. DUO™ Tube Set and V.A.C. VERALINK™ Cassette tubing are open.

3. Ensure that the tubing is not kinked, crimped or blocked in any way.

4. If the V.A.C.® Therapy Pressure Deviation Alarm (Therapy Interrupted) remains after completing steps 2 and 3, check patient positioning or any external compression devices that may impede flow. Remove external compression device.

5. Select **Reset** to return to the **Home** screen.

6. Ensure therapy is ON by checking the status bar (page 85). If not, select **Start / Stop** to restart therapy.

*If alarm condition cannot be resolved, contact KCI.*

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
V.A.C.* Therapy Instill Tube Blockage Alert (Therapy Interrupted)

**Low Priority Alert** - This alert screen appears when a blockage is present in the instillation line of the V.A.C. VERAT.R.A.C.™ Pad or V.A.C. VERAT.R.A.C. DUO™ Tube Set. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select **Audio Pause** to silence alert for two minutes during troubleshooting.

2. Ensure clamps on the V.A.C. VERAT.R.A.C.™ Pad or V.A.C. VERAT.R.A.C. DUO™ Tube Set and V.A.C. VERALINK™ Cassette are open.

3. Ensure that the tubing is not kinked, crimped, or blocked in any way.

4. Ensure the V.A.C. VERALINK™ Cassette is fully engaged and latched. See the **Attaching the V.A.C. VERALINK™ Cassette to the V.A.C.ULTA™ Therapy Unit** section (page 28) of this manual for more information.

5. Ensure that the instillation solution in the V.A.C. VERALINK™ Cassette tubing is still liquid and flows freely. If the solution has degraded to a thicker consistency, change any or all of the following:
   - V.A.C. VERALINK™ Cassette
   - V.A.C. VERAT.R.A.C.™ Pad or V.A.C. VERAT.R.A.C. DUO™ Tube Set
   - Solution bag / bottle

6. If the V.A.C.* Therapy Instill Tube Blockage Alert remains after completing steps 2 - 5, check patient positioning or any external compression devices that may impede flow. If applicable, remove external compression device.

7. Select **Reset** to return to the **Home** screen.

*Alert screen will clear when the blockage is corrected.*
V.A.C.® Therapy Battery Low Alert

Low Priority Alert - This alert screen appears approximately two hours before the battery power level is too low to support continued operation of the V.A.C. ULTA™ Therapy Unit. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Connect the therapy unit to a wall outlet using the KCI supplied power supply to recharge battery. An amber light at the bottom of the touch screen and a battery charge icon indicate the unit is charging. Refer to the Charge Battery section of this manual (page 23) for more information.

   Once the V.A.C. ULTA™ Therapy Unit is plugged into a wall outlet, the Battery Low Alert screen will automatically clear.

OR

3. Select Reset to return to the Home screen.

Therapy continues.
V.A.C.® Therapy Battery Critical Alarm

Medium Priority Alarm - This alarm screen appears approximately 30 minutes before the battery power level is too low to support continued operation of the V.A.C.ULTA™ Therapy Unit. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select Audio Pause to silence alarm for two minutes during troubleshooting.

2. Connect the therapy unit to a wall outlet using KCI supplied power supply to recharge battery. An amber light at the bottom of the touch screen and a battery charge icon indicates the unit is charging. Refer to the Charge Battery section of this manual (page 23) for more information.

3. If the Battery Critical Alarm screen does not automatically clear, select Reset to return to the Home screen.

4. Ensure therapy is ON by checking the status bar (page 85). If not, select Start / Stop to restart therapy.

V.A.C.® Therapy continues, however, if this alarm is not resolved within approximately thirty minutes, therapy will be interrupted.

The V.A.C.ULTA™ Therapy must be plugged into a wall outlet in order to continue therapy.

Alarm logs and settings are not lost in the case of a total power loss or if the unit is power cycled (turned off then back on).

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
**Battery Exhausted**

**Medium Priority Alarm** - This alarm screen appears when the battery power level is too low to power on the V.A.C.ULTA™ Therapy Unit.

To resolve this alarm:

1. Connect the therapy unit to a wall outlet using KCI supplied power supply to recharge battery. An amber light at the bottom of the touch screen and a battery charge icon indicates the unit is charging. Refer to the **Charge Battery** section of this manual (page 23) for more information.

2. Power the V.A.C.ULTA™ Therapy Unit on and initiate therapy. Refer to the **Power the V.A.C.ULTA™ Therapy Unit On or Off** section of this manual (page 42) for more information.
V.A.C.® Therapy Internal Temperature Alert

Low Priority Alert - This alert screen appears when the internal temperature of the V.A.C.ULTA™ Therapy Unit is outside its specified limits. This alert will be accompanied by a repeating audible tone.

Therapy will continue while this alert is active. The touch screen will be turned off after five minutes of inactivity. The screen will illuminate when touched. Battery charging is stopped.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Move the therapy unit to an environment with an operational temperature range as detailed in the Specifications section of this manual (page 194).

   It may take up to two hours for the therapy unit to return to operating temperatures.

3. Select Reset to return to the Home screen.

Therapy continues.

If alarm condition cannot be resolved, contact KCI.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
Medium Priority Alarm - This alarm screen appears when there is a system fault within the V.A.C.™ Therapy Unit after it has been powered on. Several different types of system errors may occur. A number will appear next to Error Code that represents the diagnostic code of the system fault. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Select Audio Pause to silence alarm for two minutes during troubleshooting.

2. Record the Error Code number.

3. Power the unit off and then on using the Power button on the front of the unit (page 18).

If alarm condition cannot be resolved, contact KCI.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
**System Error Alarm (at Power On)**

**Medium Priority Alarm** - This alarm screen appears when there is a system fault within the V.A.C.UTA™ Therapy Unit while the unit is powering on. "00000001" represents the diagnostic code of the system fault. This alarm will be accompanied by a repeating audible tone.

To resolve this alarm:

1. Record the Error Code number (00000001).

2. Power the unit off and then on using the **Power** button on the front of the unit (page 18).

*If alarm condition cannot be resolved, contact KCI.*

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
Utilities Tab - V.A.C.® Therapy

Use the Utilities Tab screen to set preferences for the V.A.C.ULTA™ Therapy Unit. Certain selections are available no matter what therapy is active. Those selections are discussed in the Utilities Tab chapter. Selections that are unique to the selected therapy are detailed below.

The following options are available from the Utilities Tab Home screen:

- **SEAL CHECK™ Leak Detector** - An on-screen bar graph will indicate leak level and an audible tone will sound if unit detects a significant leak (page 147).

  - The V.A.C. VERALINK™ Cassette (page 28) must be installed for the Dressing Soak tool to be available.

- **Dressing Soak** - Use to soak the dressing with solution in preparation for a dressing change (page 107).

  - Only available if the V.A.C. VERALINK™ Cassette is attached.

- **Help** - Use to access the V.A.C.ULTA™ Therapy Unit’s on-screen help features.

Refer to the Utilities Tab chapter for more information (page 181).
Dressing Soak

Use Dressing Soak to soak the dressing with solution in preparation for a dressing change.

The V.A.C. VERALINK™ Cassette (page 28) must be installed for the Dressing Soak tool to be available.

1. Ensure that the instillation line is properly connected.

2. Ensure that all four tubing clamps are open.

3. Ensure that the V.A.C. VERALINK™ Cassette is properly installed (page 28).

4. Ensure that the canister has adequate capacity remaining for the dressing change.

5. Select Dressing Soak from the Home screen to continue to the Dressing Soak screen.

6. Select the target Dressing Soak Volume (mL).

7. Select the target Dressing Soak Time (minutes).

8. Select OK to confirm settings and return to the Home screen.

9. The V.A.C.ULTA™ Therapy Unit will complete the Instill, Soak, and fluid removal phases. Therapy phase will be displayed in the status bar (page 85) at the top of the screen. The current therapy status will also appear under the icon of the therapy unit along with time or fluid amount (during the Instill phase) remaining.

10. Once the Dressing Soak fluid removal phase is complete, the dressing can be removed.

11. Select Exit to return to the Home screen.

Refer to the appropriate dressing Instructions for Use for safety information and procedures to change the dressing.
PREVENA™ Therapy Configuration - Overview

The following flow chart shows the basic steps required to configure PREVENA™ Therapy. Refer to the following pages for detailed information about individual screens and options.

Press and hold Power button until light comes on.

**Required for PREVENA™ Therapy:**
- Canister
- PREVENA™ Dressing

Select PREVENA™ Therapy. (page 42)

Select OK to begin SEAL CHECK™ Leak Detector (page 148)

Drawdown begins.

Screen shots shown above are for representation only. Refer to the page numbers listed for a more detailed view and more detailed information.

Settings displayed will vary depending on settings defined by user.
This **Home** screen is the main screen displayed by the V.A.C.ULTA™ Therapy Unit during **PREVENA™ Therapy**. It is used to access important information about the status of therapy.

Therapy phase and status (ON or OFF) will be displayed in the status bar at the top of the screen. The current therapy pressure will also appear above the icon of the dressing.

The following selections are available from the **Home** screen for **PREVENA™ Therapy**:

**Therapy Settings** - Use to view current therapy settings.

**SEAL CHECK™ Leak Detector** - An on-screen bar graph will indicate leak level and an audible tone will sound if unit detects a significant leak (page 145).

**Information** - Use to view a summary of therapy history and current therapy settings (page 111).

**Start / Stop** - Use to start or stop therapy.

**Help** - Use to access the V.A.C.ULTA™ Therapy Unit’s on-screen help features.

**Leak Detection** - If the therapy unit detects a leak in the system temporarily above the Leak Alarm threshold, the **Home** screen for **PREVENA™ Therapy** will display a yellow box around the dressing. Refer to the instructions for use provided with the dressings for information on using excess drape material to seal any leak areas.

Refer to page 41 for a list of **Common Touch Screen Buttons** not described here.
Information Screens - PREVENA™ Therapy

These screens will display the current therapy settings and a summary of therapy applied to the patient.

1. Select **Information** from the **Home** screen to continue to the **Therapy Summary** tab. Use this tab to review the Therapy Start Date and Therapy Time. If the Log feature is used, the date and time for Canister Last Changed and Dressing Last Changed will also be displayed.

2. Select **Current Settings** to continue to the **Current Settings** screen. Use this tab to review the current therapy settings.

3. Select **Change Settings** to continue to the **Confirm Settings** screen (page 109).

4. Select **Cancel** to return to the **Home** screen for PREVENA™ Therapy.
PREVENA™ Therapy Alerts

The following alerts may appear on the touch screen during PREVENA™ Therapy.

Alerts are accompanied by a repeating audible tone.

Following initiation of therapy, if an audible tone is not heard when SEAL CHECK™ Leak Detector is displayed and Seal Audio tone is turned ON, the alerts may not be working properly. Contact KCI for more information. Alerts are intended to be heard when facing the therapy unit at a maximum of one meter away. If two or more alert conditions are present, only the highest priority alert will be displayed.

**Low Priority Alert Condition** - Displayed on the touch screen when the V.A.C. ULTRA™ Therapy Unit detects a condition that requires attention. Alerts will be accompanied by a repeating audible tone approximately every 20 seconds (two beeps).

Select **Seal Audio** to turn the audible tone ON.

Select **Help** for more information regarding alert resolution.

*If alert conditions cannot be resolved, contact KCI.*
PREVENA™ Therapy Blockage Alert

Low Priority Alert - This alert screen appears when the V.A.C.ULTA™ Therapy Unit has detected a potential blockage. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Ensure clamps on the dressing tubing and canister tubing are open.

3. Ensure tubing is not kinked, crimped, or blocked in any way.

4. If the PREVENA™ Therapy Blockage Alert remains after completing steps 2 and 3, lower the therapy unit and tubing to be level with or below the wound site. If the alert is resolved by lowering the unit, normal use may resume.

5. Select Reset to return to the Home screen.

6. Ensure therapy is ON by checking the status bar (page 110). If not, select Start / Stop to restart therapy.

The V.A.C.ULTA™ Therapy Unit will continue to attempt to apply therapy during this alert.

If alert condition cannot be resolved, contact KCI.
PREVENA™ Therapy Blockage Alert (Therapy Interrupted)

Low Priority Alert - This alert screen appears when a blockage is present. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Ensure clamps on the dressing tubing and canister tubing are open.

3. Ensure tubing is not kinked, crimped, or blocked in any way.

4. If the PREVENA™ Therapy Blockage Alert (Therapy Interrupted) remains after completing steps 2 and 3, lower the therapy unit and tubing to be level with or below the wound site. If the alert is resolved by lowering the unit, normal use may resume.

5. Select Reset to return to the Home screen.

6. Ensure therapy is ON by checking the status bar (page 110). If not, select Start / Stop to restart therapy.

Therapy unit remains on; however, negative pressure at the wound site may be below therapeutic value.

If alert condition cannot be resolved, contact KCI.
PREVENA™ Therapy Canister Full Alert

Low Priority Alert - This alert screen appears when the canister is full and should be replaced. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Check if canister is full by comparing the level of fluid to the graduated marks on the canister.

   - Graduated Marks

   - A full canister is approximately 300 mL or 500 mL depending on canister used. Canister release button will be flashing.

3. If canister is not full, select Reset to return to the Home screen.

4. If canister is full or near full call the treating physician immediately for additional instructions.

5. Select Reset to return to the Home screen.

6. Select Start / Stop to restart therapy.
PREVENA™ Therapy Canister Not Engaged Alert

**Low Priority Alert** - This alert screen appears when the canister is not fully inserted and / or properly latched. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select **Audio Pause** to silence alert for two minutes during troubleshooting.

2. Remove the canister by pressing the **Canister Release** button (page 18) on the unit.

3. Inspect the canister and V.A.C.ULTA™ Therapy Unit to ensure no foreign objects or debris interfere with the canister and therapy unit’s mating surfaces.

4. Ensure both seals are present and seated completely (page 19). If seals are missing or damaged, contact KCI.

5. Re-attach the canister to the V.A.C.ULTA™ Therapy Unit ensuring that the canister is fully engaged and latched (page 32). An audible click indicates that the canister is properly installed.

6. Select **Reset** to return to the **Home** screen.

7. Select **Start / Stop** to restart therapy.

8. If this alert continues to appear, repeat steps 2 - 7 with a new canister.

*If alert condition cannot be resolved, contact KCI.*
PREVENA™ Therapy Therapy Inactive Alert

Low Priority Alert - This alert screen appears when therapy (PREVENA™ Therapy) has been off or paused for more than 15 minutes (with the unit powered on). This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Select Reset to return to the Home screen.

3. Select Start / Stop to restart therapy.

4. If therapy is not desired, turn the V.A.C.ULTA™ Therapy Unit off by using the Power button on the front of the unit.
PREVENA™ Therapy Leak Alert

Low Priority Alert - This alert screen appears when a significant negative pressure leak has been detected. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Ensure connector between dressing tubing and canister tubing are properly locked.

3. Ensure canister is fully engaged. (See Canister Not Engaged Alert, page 117).

4. Select SEAL CHECK™ to access the SEAL CHECK™ Leak Detector. Refer to the SEAL CHECK™ Leak Detector section (page 145) of this manual for details on how to use the SEAL CHECK™ Leak Detector and how to repair leaks.

5. Once the leak is resolved using the SEAL CHECK™ Leak Detector, select Exit on the SEAL CHECK™ Leak Detector screen to return to the PREVENA™ Therapy Leak Alert screen.

6. Select Reset to return to the Home screen.

7. Ensure therapy is ON by checking the Status Bar (page 110). If not, select Start / Stop to restart therapy.

The V.A.C.UTA™ Therapy Unit will continue to attempt to apply therapy during this alert.

If alert condition cannot be resolved, contact KCI.
**PREVENA™ Therapy Battery Low Alert**

**Low Priority Alert** - This alert screen appears approximately two hours before the battery power level is too low to support continued operation of the V.A.C.ULTA™ Therapy Unit. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select **Audio Pause** to silence alert for two minutes during troubleshooting.

2. Connect the therapy unit to a wall outlet using the KCI supplied power supply to recharge battery. An amber light at the bottom of the touch screen and a battery charge icon indicate the unit is charging. Refer to the **Charge Battery** section of this manual (page 23) for more information.

   *Once the V.A.C.ULTA™ Therapy Unit is plugged into a wall outlet, the Battery Low Alert screen will automatically clear.*

   OR

3. Select **Reset** to return to the **Home** screen.

   *Therapy continues.*
PREVENA™ Therapy Battery Critical Alert

Low Priority Alert - This alert screen appears approximately 30 minutes before the battery power level is too low to support continued operation of the V.A.C.ULTA™ Therapy Unit. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Connect the therapy unit to a wall outlet using KCI supplied power supply to recharge battery. An amber light at the bottom of the touch screen and a battery charge icon indicates the unit is charging. Refer to the Charge Battery section of this manual (page 23) for more information.

   Once the V.A.C.ULTA™ Therapy Unit is plugged into a wall outlet, the Battery Critical Alert screen will automatically clear.

   OR

3. Select Reset to return to the Home screen.

   PREVENA™ Therapy continues, however, if this alert is not resolved within approximately thirty minutes, therapy will be interrupted.

4. Ensure therapy is ON by checking the status bar (page 110). If not, select Start / Stop to restart therapy.

   The V.A.C.ULTA™ Therapy must be plugged into a wall outlet in order to continue therapy.

   Alert logs and settings are not lost in the case of a total power loss or if the unit is power cycled (turned off then back on).
Battery Exhausted

Low Priority Alert - This alert screen appears when the battery power level is too low to power on the V.A.C.ULTA™ Therapy Unit.

To resolve this alert:

1. Connect the therapy unit to a wall outlet using KCI supplied power supply to recharge battery. An amber light at the bottom of the touch screen and a battery charge icon indicates the unit is charging. Refer to the Charge Battery section of this manual (page 23) for more information.

2. Power the V.A.C.ULTA™ Therapy Unit on and initiate therapy. Refer to the Power the V.A.C.ULTA™ Therapy Unit On or Off section of this manual (page 42) for more information.
Prevena™ Therapy Internal Temperature Alert

Low Priority Alert - This alert screen appears when the internal temperature of the V.A.C. Ultra™ Therapy Unit is outside its specified limits. This alert will be accompanied by a repeating audible tone.

Therapy will continue while this alert is active. The touch screen will be turned off after five minutes of inactivity. The screen will illuminate when touched. Battery charging is stopped.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Move the therapy unit to an environment with an operational temperature range as detailed in the Specifications section of this manual (page 194).

It may take up to two hours for the therapy unit to return to operating temperatures.

3. Select Reset to return to the Home screen.

Therapy continues.

If alert condition cannot be resolved, contact KCI.
**PREVENA™ Therapy System Error Alert (Therapy Interrupted) (after Power On)**

**Low Priority Alert** - This alert screen appears when there is a system fault within the V.A.C.ULTA™ Therapy Unit after it has been powered on. Several different types of system errors may occur. A number will appear next to Error Code: that represents the diagnostic code of the system fault. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select **Audio Pause** to silence alert for two minutes during troubleshooting.

2. Record the Error Code number.

3. Power the unit off and then on using the **Power** button on the front of the unit (page 18).

*If alert condition cannot be resolved, contact KCI.*
System Error Alert (at Power On)

**Low Priority Alert** - This alert screen appears when there is a system fault within the V.A.C.UTA™ Therapy Unit while the unit is powering on. "00000001" represents the diagnostic code of the system fault. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Record the Error Code number (00000001).

2. Power the unit off and then on using the **Power** button on the front of the unit (page 18).

*If alert condition cannot be resolved, contact KCI.*
Utilities Tab - PREVENA™ Therapy

Use the Utilities Tab screen to set preferences for the V.A.C.ULTA™ Therapy Unit. Certain selections are available no matter what therapy is active. Those selections are discussed in the Utilities Tab chapter. Selections that are unique to the selected therapy are detailed below.

The following options are available from the Utilities Tab Home screen:

**SEAL CHECK™ Leak Detector** - An on-screen bar graph will indicate leak level and an audible tone will sound if unit detects a significant leak (page 145).

**Help** - Use to access the V.A.C.ULTA™ Therapy Unit’s on-screen help features.

Refer to the Utilities Tab chapter for more information (page 181).
ABTHERA™ Therapy Overview

The following flow chart shows the basic steps required to configure **ABTHERA™ Therapy**. Refer to the following pages for detailed information about individual screens and options.

Press and hold **Power** button until light comes on.

**Required for ABTHERA™ Therapy:**
- Canister
- ABTHERA™ SENSAT.R.A.C™
  Open Abdomen Dressing

![Screen shots shown above are for representation only. Refer to the page numbers listed for a more detailed view and more detailed information.](image)

*Settings displayed will vary depending on settings defined by user.*
This screen allows the user to adjust the Target Pressure the V.A.C.UTA™ Therapy Unit will deliver during ABTHERA™ Therapy:

- **Target Pressure (mmHg) - (Default = 125 mmHg)**
  Prescribed negative pressure level for ABTHERA™ Therapy.
  Target Pressure can be set to 100, 125 or 150 mmHg.

1. Use + / - to select desired value for ABTHERA™ Therapy.

2. Once Target Pressure has been entered, select OK to initiate therapy and continue to the SEAL CHECK™ Leak Detector screen for ABTHERA™ Therapy.

3. Select Cancel to return to the Choose Therapy screen.
Home Screen - ABTHERA™ Therapy

This Home screen is the main screen displayed by the V.A.C.ULTA™ Therapy Unit during ABTHERA™ Therapy. It is used to access important information about the status of therapy.

Therapy mode and status (ON or OFF) will be displayed in the status bar at the top of the screen. The current therapy pressure will also appear above the icon of dressing.

The following options are available from the Home screen for ABTHERA™ Therapy:

Therapy Settings - Use to change current therapy settings.

SEAL CHECK™ Leak Detector - An on-screen bar graph will indicate leak level and an audible tone will sound if unit detects a significant leak (page 145).

Information - Use to view a summary of therapy history and current therapy settings (page 130).

Start / Stop - Use to start or stop therapy.

Help - Use to access to the V.A.C.ULTA™ Therapy Unit’s on-screen help features.

Leak Detection - If the therapy unit detects a leak in the system temporarily above the Leak Alarm threshold, the Home screen for ABTHERA™ Therapy will display a yellow box around the dressing. Refer to the instructions for use provided with the dressings for information on using excess drape material to seal any leak areas.

Refer to page 41 for a list of Common Touch Screen Buttons not described here.
Information Screens - ABTHERA™ Therapy

These screens will display the current therapy settings and a summary of therapy applied to the patient.

1. Select Information from the Home screen to continue to the Therapy Summary tab. Use this tab to review the Therapy Start Date and Therapy Time. If the Log feature is used, the date and time for Canister Last Changed and Dressing Last Changed will also be displayed.

2. Select Current Settings to continue to the Current Settings screen. Use this tab to review the current therapy settings.

3. Select Change Settings to continue to the Confirm Settings screen (page 128).

4. Select Cancel on the Confirm Settings screen to return to the Home screen for ABTHERA™ Therapy.
ABTHERA™ Therapy Alerts

The following alerts may appear on the touch screen during ABTHERA™ Therapy.

Alerts are accompanied by a repeating audible tone.

Following initiation of therapy, if an audible tone is not heard when SEAL CHECK™ Leak Detector is displayed and Seal Audio tone is turned ON, the alerts may not be working properly. Contact KCI for more information. Alerts are intended to be heard when facing the therapy unit at a maximum of one meter away. If two or more alert conditions are present, only the highest priority alert will be displayed.

**Low Priority Alert Condition** - Displayed on the touch screen when the V.A.C.ULTA™ Therapy Unit detects a condition that requires attention. Alerts will be accompanied by a repeating audible tone approximately every 20 seconds (two beeps).

Select **Seal Audio** to turn audible tone ON.

Select **Help** for more information regarding alert resolution.

*If alert conditions cannot be resolved, contact KCI.*
ABTHERA™ Therapy Blockage Alert

**Low Priority Alert** - This alert screen appears when the V.A.C.ULTA™ Therapy Unit has detected a potential blockage. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select **Audio Pause** to silence alert for two minutes during troubleshooting.

2. Ensure clamps on the tubing on the SENSAT.R.A.C.™ Pad and canister tubing are open.

3. Ensure tubing is not kinked, crimped, or blocked in any way.

4. If the **ABTHERA™ Therapy Blockage Alert** remains after completing steps 2 and 3, lower the therapy unit and tubing to be level with or below the wound site. If the alert is resolved by lowering the unit, normal use may resume.

5. Select **Reset** to return to the **Home** screen.

6. Ensure therapy is ON by checking the status bar (page 129). If not, select **Start / Stop** to restart therapy.

*The V.A.C.ULTA™ Therapy Unit will continue to attempt to apply therapy during this alert.*

*If alert condition cannot be resolved, contact KCI.*
ABTHERA™ Therapy Blockage Alert (Therapy Interrupted)

Low Priority Alert - This alert screen appears when a blockage is present. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Ensure clamps on the tubing on the SENSAT.R.A.C.™ Pad and canister tubing are open.

3. Ensure tubing is not kinked, crimped, or blocked in any way.

4. If the ABTHERA™ Therapy Blockage Alert (Therapy Interrupted) remains after completing steps 2 and 3, lower the therapy unit and tubing to be level with or below the wound site. If the alert is resolved by lowering the unit, normal use may resume.

5. Select Reset to return to the Home screen.

6. Ensure therapy is ON by checking the status bar (page 129). If not, select Start / Stop to restart therapy.

Therapy unit remains on; however, negative pressure at the wound site may be below therapeutic value.

If alert condition cannot be resolved, contact KCI.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
ABTHERA™ Therapy Canister Full Alert

Low Priority Alert - This alert screen appears when the canister is full and should be replaced. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Check if canister is full by comparing the level of fluid to the graduated marks on the canister.

3. If canister is not full, select Reset to return to the Home screen.

4. If canister is full, change canister and select Reset on this screen to return to the Home screen. See the Changing the Canister section of this manual (page 34) for additional information.

5. Select Start / Stop to restart therapy.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
ABTHERA™ Therapy Canister Not Engaged Alert

Low Priority Alert - This alert screen appears when the canister is not fully inserted and/or properly latched. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Remove the canister by pressing the Canister Release button (page 18) on the unit.

3. Inspect the canister and V.A.C.ULTA™ Therapy Unit to ensure no foreign objects or debris interfere with the canister and therapy unit’s mating surfaces.

4. Ensure both seals are present and seated completely (page 19). If seals are missing or damaged, contact KCI.

5. Re-attach the canister to the V.A.C.ULTA™ Therapy Unit ensuring that the canister is fully engaged and latched (page 32). An audible click indicates that the canister is properly installed.

6. Select Reset to return to the Home screen.

7. Select Start / Stop to restart therapy.

8. If this alert continues to appear, repeat steps 2 - 7 with a new canister.

If alert condition cannot be resolved, contact KCI.
Low Priority Alert - This alert screen appears when therapy (ABTHERA™ Therapy) has been off or paused for more than 15 minutes (with the unit powered on). This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select **Audio Pause** to silence alert for two minutes during troubleshooting.

2. Select **Reset** to return to the **Home** screen.

3. Select **Start / Stop** to restart therapy.

4. If therapy is not desired, turn the V.A.C.ULTA™ Therapy Unit off by using the **Power** button on the front of the unit.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
ABTHERA™ Therapy Leak Alert

**Low Priority Alert** - This alert screen appears when a significant negative pressure leak has been detected. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select **Audio Pause** to silence alert for two minutes during troubleshooting.

2. Ensure connector between dressing tubing and canister tubing is properly locked.

3. Ensure canister is fully engaged. (See **Canister Not Engaged Alert**, page 135).

4. Select **SEAL CHECK™** to access the SEAL CHECK™ Leak Detector. Refer to the **SEAL CHECK™ Leak Detector** section (page 145) of this manual for details on how to use the SEAL CHECK™ Leak Detector and how to repair leaks.

5. Once the leak is resolved using the SEAL CHECK™ Leak Detector, select **Exit** on the **SEAL CHECK™ Leak Detector** screen to return to the **ABTHERA™ Therapy Leak Alert** screen.

6. Select **Reset** to return to the **Home** screen.

7. Ensure therapy is ON by checking the Status Bar (page 129). If not, select **Start / Stop** to restart therapy.

*The V.A.C.ULTA™ Therapy Unit will continue to attempt to apply therapy during this alert.*

*If alert condition cannot be resolved, contact KCI.*
ABTHERA™ Therapy Battery Low Alert

**Low Priority Alert** - This alert screen appears approximately two hours before the battery power level is too low to support continued operation of the V.A.C.ULTA™ Therapy Unit. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select **Audio Pause** to silence alert for two minutes during troubleshooting.

2. Connect the therapy unit to a wall outlet using the KCI supplied power supply to recharge battery. An amber light at the bottom of the touch screen and a battery charge icon indicate the unit is charging. Refer to the **Charge Battery** section of this manual (page 23) for more information.

   *Once the V.A.C.ULTA™ Therapy Unit is plugged into a wall outlet, the Battery Low Alert screen will automatically clear.*

OR

3. Select **Reset** to return to the **Home** screen.

   *Therapy continues.*
**ABTHERA™ Therapy Battery Critical Alert**

**Low Priority Alert** - This alert screen appears approximately 30 minutes before the battery power level is too low to support continued operation of the V.A.C.ULTA™ Therapy Unit. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select **Audio Pause** to silence alert for two minutes during troubleshooting.

2. Connect the therapy unit to a wall outlet using KCI supplied power supply to recharge battery. An amber light at the bottom of the touch screen and a battery charge icon indicates the unit is charging. Refer to the **Charge Battery** section of this manual (page 23) for more information.

   Once the V.A.C.ULTA™ Therapy Unit is plugged into a wall outlet, the Battery Critical Alert screen will automatically clear.

OR

3. Select **Reset** to return to the **Home** screen.

   ABTHERA™ Therapy continues, however, if this alert is not resolved within approximately thirty minutes, therapy will be interrupted.

4. Ensure therapy is ON by checking the status bar (page 129). If not, select **Start / Stop** to restart therapy.

   The V.A.C.ULTA™ Therapy must be plugged into a wall outlet in order to continue therapy.

   Alert logs and settings are not lost in the case of a total power loss or if the unit is power cycled (turned off then back on).

   Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
Battery Exhausted

Low Priority Alert - This alert screen appears when the battery power level is too low to power on the V.A.C.ULTA™ Therapy Unit.

To resolve this alert:

1. Connect the therapy unit to a wall outlet using KCI supplied power supply to recharge battery. An amber light at the bottom of the touch screen and a battery charge icon indicates the unit is charging. Refer to the Charge Battery section of this manual (page 23) for more information.

2. Power the V.A.C.ULTA™ Therapy Unit on and initiate therapy. Refer to the Power the V.A.C.ULTA™ Therapy Unit On or Off section of this manual (page 42) for more information.
ABTHERA™ Therapy Internal Temperature Alert

Low Priority Alert - This alert screen appears when the internal temperature of the V.A.C. ULTA™ Therapy Unit is outside its specified limits. This alert will be accompanied by a repeating audible tone.

Therapy will continue while this alert is active. The touch screen will be turned off after five minutes of inactivity. The screen will illuminate when touched. Battery charging is stopped.

To resolve this alert:

1. Select Audio Pause to silence alert for two minutes during troubleshooting.

2. Move the therapy unit to an environment with an operational temperature range as detailed in the Specifications section of this manual (page 194).

3. Select Reset to return to the Home screen.

Therapy continues.

If alert condition cannot be resolved, contact KCI.

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
ABTHERA™ Therapy System Error Alert (Therapy Interrupted) (after Power On)

**Low Priority Alert** - This alert screen appears when there is a system fault within the V.A.C.ULTA™ Therapy Unit after it has been powered on. Several different types of system errors may occur. A number will appear next to Error Code: that represents the diagnostic code of the system fault. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Select **Audio Pause** to silence alarm for two minutes during troubleshooting.

2. Record the Error Code number.

3. Power the unit off and then on using the **Power** button on the front of the unit (page 18).

*If alert condition cannot be resolved, contact KCI.*

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
System Error Alert (at Power On)

**Low Priority Alert** - This alert screen appears when there is a system fault within the V.A.C.ULTA™ Therapy Unit while the unit is powering on. “00000001” represents the diagnostic code of the system fault. This alert will be accompanied by a repeating audible tone.

To resolve this alert:

1. Record the Error Code number (00000001).
2. Power the unit off and then on using the **Power** button on the front of the unit (page 18).

*If alert condition cannot be resolved, contact KCI.*

Certain KCI Dressings must be replaced with an alternate dressing if therapy is interrupted or off for more than two hours. See the Safety Information Sheet provided with the individual dressing for further information.
Utilities Tab - ABTHERA™ Therapy

Use the Utilities Tab screen to set preferences for the V.A.C.ULTA™ Therapy Unit. Certain selections are available no matter what therapy is active. Those selections are discussed in the Utilities Tab chapter. Selections that are unique to the selected therapy are detailed below.

The following options are available from the Utilities Tab Home screen:

**SEAL CHECK™ Leak Detector** - An on-screen bar graph will indicate leak level and an audible tone will sound if unit detects a significant leak (page 145).

**Help** - Use to access the V.A.C.ULTA™ Therapy Unit’s on-screen help features.
SEAL CHECK™ Leak Detector Overview

The SEAL CHECK™ Leak Detector is used to help find negative pressure leaks.

Access the SEAL CHECK™ Leak Detector from the Home screen. The SEAL CHECK™ Leak Detector will also automatically run during the initial Drawdown phase once therapy has been initiated.

Most leaks occur:

- where the drape meets the skin.
- where the V.A.C. VERAT.R.A.C.™ Pad, V.A.C. VERAT.R.A.C. DUO™ Tube Set pads or SENSAT.R.A.C.™ Pad is attached to the drape, if applicable.
- at tubing connections.
- if canister is not fully seated to therapy unit.

*Seal Audio default is set to OFF.*
1. Ensure that both the V.A.C.® Canister tubing and instillation line are properly connected.

2. Ensure that all four tubing clamps are open.

3. Ensure the V.A.C. VERALINK™ Cassette is properly installed (page 28), if applicable.

4. Ensure that the canister is properly installed (page 32).

5. Once therapy has been initiated, select SEAL CHECK™ Leak Detector.

The SEAL CHECK™ Leak Detector uses an audible tone and bar graph to assist in finding leaks. The frequency of the audible tone and length of the bar graph will reflect the leak rate. The audible tone slows down and the bar graph decreases in length as the leak is found.

The bar graph will be yellow if a significant leak is detected. A green bar graph indicates the V.A.C.ULTA™ Therapy Unit is operating normally. The line on the bar graph is the transition point from yellow to green.

During initial dressing draw down, the bar graph should turn yellow and then return to a green state if there are no significant leaks.

6. Select Seal Audio to turn seal audio tone on or off. Seal Audio default is set to OFF.

7. While therapy is on and using light pressure, move your hand and fingers slowly around the edges of the drape and tubing pads. The bar graph will decrease and change from yellow to green and the frequency of the audible tone (if Seal Audio is on) will decrease when a leak is found and repaired.

8. Refer to the instructions for use provided with the dressings for information on using excess drape material to seal any leak areas.

9. Select Exit to return to the Home screen.
1. Ensure that the V.A.C.® Canister tubing is properly connected.

2. Ensure that both tubing clamps are open.

3. Ensure that the canister is properly installed (page 32).

4. Once therapy has been initiated, select SEAL CHECK™ Leak Detector.

The SEAL CHECK™ Leak Detector uses an audible tone and bar graph to assist in finding leaks. The frequency of the audible tone and length of the bar graph will reflect the leak rate. The audible tone slows down and the bar graph decreases in length as the leak is found.

The bar graph will be yellow if a significant leak is detected. A green bar graph indicates the V.A.C.ULTA™ Therapy Unit is operating normally. The line on the bar graph is the transition point from yellow to green.

During initial dressing draw down, the bar graph should turn yellow and then return to a green state if there are no significant leaks.

5. Select Seal Audio to turn seal audio tone on or off. Seal Audio default is set to OFF.

6. While therapy is on and using light pressure, move your hand and fingers slowly around the edges of the drape and tubing pad. The bar graph will decrease and change from yellow to green and the frequency of the audible tone (if Seal Audio is on) will decrease when a leak is found and repaired.

7. Refer to the instructions for use provided with the dressings for information on using excess drape material to seal any leak areas.

Select Exit to return to the Home screen.
1. Ensure that the V.A.C.® Canister tubing is properly connected.

2. Ensure that both tubing clamps are open.

3. Ensure that the canister is properly installed (page 32).

4. Once therapy has been initiated, select SEAL CHECK™ Leak Detector.

The SEAL CHECK™ Leak Detector uses an audible tone and bar graph to assist in finding leaks. The frequency of the audible tone and length of the bar graph will reflect the leak rate. The audible tone slows down and the bar graph decreases in length as the leak is palpated.

The bar graph will be yellow if a significant leak is detected. A green bar graph indicates the V.A.C.ULTA™ Therapy Unit is operating normally. The line on the bar graph is the transition point from yellow to green.

**If the patient will be transitioned to a PREVENA™ Therapy Unit:**

The SEAL CHECK™ Leak Detector screen will display an X if the dressing seal is not adequate for use with the associated PREVENA™ Therapy Unit. The PREVENA™ Therapy Unit may sound a Leak Alarm when connected.

The SEAL CHECK™ Leak Detector screen will display a Check Mark if the dressing seal is adequate for use with the associated PREVENA™ Therapy Unit. The PREVENA™ Therapy Unit should not sound a Leak Alarm when connected.

**During initial dressing draw down, the bar graph should turn yellow and then return to a green state if there are no significant leaks.**

5. Select Seal Audio to turn seal audio tone on or off. Seal Audio default is set to OFF.

6. While therapy is on and using light pressure, move your hand and fingers slowly around the edges of the dressing and drape. The bar graph will decrease and change from yellow to green and the frequency of the audible tone (if Seal Audio is on) will decrease when a leak is found and repaired.

7. Refer to the instructions for use provided with the dressings for information on using excess drape material to seal any leak areas.

8. Select Exit to return to the Home screen.
1. Ensure that the V.A.C.® Canister tubing is properly connected.

2. Ensure that both tubing clamps are open.

3. Ensure that the canister is properly installed (page 32).

4. Once therapy has been initiated, select SEAL CHECK™ Leak Detector.

The SEAL CHECK™ Leak Detector uses an audible tone and bar graph to assist in finding leaks. The frequency of the audible tone and length of the bar graph will reflect the leak rate. The audible tone slows down and the bar graph decreases in length as the leak is found.

The bar graph will be yellow if a significant leak is detected. A green bar graph indicates the V.A.C.ULTA™ Therapy Unit is operating normally. The line on the bar graph is the transition point from yellow to green.

5. Select Seal Audio to turn seal audio tone on or off. Seal Audio default is set to OFF.

6. While therapy is on and using light pressure, move your hand and fingers slowly around the edges of the drape and tubing pad. The bar graph will decrease and change from yellow to green and the frequency of the audible tone (if Seal Audio is on) will decrease when a leak is found and repaired.

7. Refer to the instructions for use provided with the dressings for information on using excess drape material to seal any leak areas.

8. Select Exit to return to the Home screen.
Log - V.A.C. VERAFLÔ™ Therapy

Use this tool to record important information about dressing and component application / changes. The information will be recorded in the Therapy History Report (page 177).

**Number of Foam Pieces** - Select the number of foam pieces used in the wound at dressing application or dressing change. Use + / -, as applicable to adjust above or below the values shown.

**Canister Changed (mL)** - Select which canister (300 mL, 500 mL or 1000 mL) was installed or changed.

**Solution Changed (mL)** - Select the size (100 to 1000 mL) of solution bag / bottle that was installed. Use + / -, as applicable to adjust above or below the values shown.

**V.A.C. VERALINK™ Changed** - Select Yes or No to indicate whether or not a V.A.C. VERALINK™ Cassette was installed or changed.
Log - V.A.C.® Therapy

Use this tool to record important information about dressing and component application / changes. The information will be recorded in the Therapy History Report (page 177).

**Number of Foam Pieces** - Select the number of foam pieces used in the wound at dressing application or dressing change. Use + / -, as applicable to adjust above or below the values shown.

**Canister Changed (mL)** - Select which canister (300 mL, 500 mL or 1000 mL) was installed or changed.

**Solution Changed (mL)** - Select the size (100 to 1000 mL) of solution bag / bottle that was installed. Use + / -, as applicable to adjust above or below the values shown.

**V.A.C. VERALINK™ Changed** - Select Yes or No to indicate whether or not a V.A.C. VERALINK™ Cassette was installed or changed.
Log - PREVENA™ Therapy

Use this tool to record important information about dressing and component application / changes. The information will be recorded in the Therapy History Report (page 177).

**Number of Foam Pieces** - Select the number of foam pieces used in the wound at dressing application or dressing change. Use + / -, as applicable to adjust above or below the values shown.

**Canister Changed (mL)** - Select which canister (300 mL, 500 mL or 1000 mL) was installed or changed.
Log - ABTHERA™ Therapy

Use this tool to record important information about dressing and component application / changes. The information will be recorded in the Therapy History Report (page 177).

**Number of Foam Pieces** - Select the number of foam pieces used in the wound at dressing application or dressing change. Use + / - , as applicable to adjust above or below the values shown.

**Canister Changed (mL)** - Select which canister (300 mL, 500 mL or 1000 mL) was installed or changed.
Use the **History Tab** screen to access History (Patient, Therapy and Alarm) and the Wound Imaging Tool.

The following options are available from the **History Tab** screen:

**Patient History** - The Patient History screen displays the patient’s information in date, time and event columns. The date is in descending order and time is displayed using the twenty-four hour clock format.

**Imaging** - The Wound Imaging feature aids in recording the wound healing process. Use to upload digital wound images for on-screen viewing or surface area and volume trending.

**Therapy History** - The Therapy History screen displays the patient’s therapy information in date, time and event columns. The date is in descending order and time is displayed using the twenty-four hour clock format.

**Alarm History** - The Alarm History screen displays the alarm information from the V.A.C.ULTA™ Therapy Unit in date, time and event columns. The date is in descending order and time is displayed using the twenty-four hour clock format.

**Help** - Use to access the V.A.C.ULTA™ Therapy Unit’s on-screen help features.
Patient History or Imaging Configuration (First Time Use) - Overview

The following flow charts show the basic steps required to establish an access code and start a new patient history log. Refer to the following pages for more detailed information about individual screens and options.

**Screen shots shown above are for representation only. Refer to the page numbers listed for a more detailed view and more detailed information.**
With **History Tab** selected, select **Patient History** button (page 155).

**Patient History** screen is displayed (page 162).

**History Tab** screen

**Enter Access Code** screen.

Select **Reset** (page 160) to create a new Patient History log.

**Create Patient History** screen.

Select **OK** to delete current Patient History (page 160).

**Patient History** screen

**Create New Patient ID** screen.

Enter Patient ID. Select **OK** (page 161).

**Create New Access Code** screen.

Enter New Access Code and confirm. Select **OK** (page 161).
Patient History

Use the Patient History screens to create a new access code and start a new patient history log, view patient history, delete patient history, export patient history, and view a wound image area graph.

Create New Patient History

1. Select the History tab (page 155).

2. Select Patient History from the History Tab screen (page 155) to continue to the Create New Access Code screen.

3. Select the New Access Code field and use the on-screen keyboard to enter an access code. The access code must be at least six characters long.

   *Record the access code. It will be needed each time patient history is accessed.*

4. Select the Confirm Access Code field and re-enter the access code entered in the New Access Code field.

5. Select OK to continue to the Create New Patient ID screen.

6. Select the Patient ID field and use the on-screen keyboard to enter the patient’s identification (ID). The patient’s ID must be 30 characters or less.

   *For security purposes, the V.A.C.® ULTA™ Therapy Unit will only allow one patient record at a time to be active. If a new access code is entered, the current access code is overwritten and all patient history associated with it is deleted.*

   *All information will be automatically deleted when the unit is returned to KCI.*

7. Select OK to continue to the Patient History screen (page 162).
Access Patient History

Once an access code is created, it must be entered to access Patient History.

1. Select the **History** tab (page 155).

2. Select **Patient History** from the **History Tab** screen (page 155) to continue to the **Enter Access Code** screen.

3. Select the **Access Code** field and use the on-screen keyboard to enter the Patient History access code.

4. Select **OK** to continue to the **Patient History** screen (page 162).

*For security purposes, the V.A.C. ULTA™ Therapy Unit will only allow one patient record at a time to be active. If a new access code is entered, the current access code is overwritten and all patient history associated with it is deleted.*

*All information will be automatically deleted when the unit is returned to KCI.*

*For security purposes, if an incorrect access code is entered 12 times, access to Patient History will be disabled. If this happens, contact KCI.*
Create New Access Code

In order to create a second patient history log, a new access code must be created. When a second access code is created, all previously recorded patient history will be deleted.

1. Select the History tab (page 155).

2. Select Patient History from the History Tab screen (page 155) to continue to the Enter Access Code screen.

3. Select Reset to create a new access code.

   For security purposes, the V.A.C. ULTA™ Therapy Unit will only allow one patient record at a time to be active. If a new access code is entered, the current access code is overwritten and all patient history associated with it is deleted.

4. Select OK on the Create Patient History warning screen to continue to the Create New Access Code screen and delete the currently stored history.
5. Select the **New Access Code** field and use the on-screen keyboard to enter an access code. The access code must be at least six characters long.

**Record the access code. It will be needed each time patient history is accessed.**

6. Select the **Confirm Access Code** field and re-enter the access code entered in the **New Access Code** field.

7. Select **OK** to continue to the **Create New Patient ID** screen.

8. Select the **Patient ID** field and use the on-screen keyboard to enter the patient’s identification (ID). The patient’s ID must be 30 characters or less.

9. Select **OK** to continue to the **Patient History** screen (page 162).

**For security purposes, the V.A.C.ULA™ Therapy Unit will only allow one patient record at a time to be active. If a new access code is entered, the current access code is overwritten and all patient history associated with it is deleted.**

**All information will be automatically deleted when the unit is returned to KCI.**
Patient History Screen

Use the Patient History Screen to view, export, or delete a Patient History log (e.g. wound imaging information and disposable component changes).

The following options are available from the Patient History screen:

- **View History** - Use to view patient history and add short notes about the patient’s treatment. For a new patient history log, this screen will not have any event entries.

- **Export History** - Use to export all patient history to a USB Drive or SD Card.

- **View Graph** - Use to view a graph of the measured wound area over time.

- **Delete History** - Use to delete the patient history data from the V.A.C. ULTA™ Therapy Unit’s memory.

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Therapy Tab (page 50, 85, 110 and 129)

Utilities Tab (page 74, 106, 126 and 144)

View Patient History (page 163)

View Wound Area Graph (page 165)

Export Patient History (page 164)

Delete Patient History (page 166)

Return to **History Tab** screen (page 155)

Help
View Patient History Screen

Use the View Patient History screen to view and add short notes about the patient’s treatment. For a new patient history log, this screen will not have any event entries.

1. Select View History from the Patient History screen (page 162) to continue to the View Patient History screen.

2. Use the Up and Down arrows to scroll through the patient’s history.

3. Select Add Note to continue to the Add Note screen.

4. Use the on-screen keyboard to add notes about the patient’s history. The note has a maximum of 90 characters.

5. Select OK to add the note, or Cancel to return to the View Patient History screen without adding the note.

6. Select Back to return to the Patient History screen.

Each instillation cycle is not recorded in the history log. Only the initial settings selected during set up are recorded.
Export Patient History Screen

Use the Export Patient History screen to export patient history to a USB Drive or SD Card.

1. Select Export History from the Patient History screen (page 162) to continue to the Export Patient History screen.

2. Insert the desired memory device (USB Drive or SD Card) into the proper port on the front of the V.A.C.ULTA™ Therapy Unit (page 18).

   Use only non-powered USB devices.

3. On the Export Patient History screen, select the memory device being used, USB or SD Card.

4. Select OK to begin exporting patient history to the memory device or select Cancel to return to the Patient History screen without exporting patient history.

5. The V.A.C.ULTA™ Therapy Unit will begin exporting patient history. A bar graph will display transfer progress.

   If the V.A.C.ULTA™ Therapy Unit detects an error during transfer, the Export Transfer Error screen will appear. Refer to the Data Transfer Errors section (page 180) of this manual for information about resolving this error.

6. Once all patient history is successfully transferred to the memory device, select Exit on the Export Successful screen to return to the Patient History screen.
View Graph - Wound Area (cm²) Screen

Use the View Graph - Wound Area (cm²) screen to view a graph of the measured wound area over time.

1. Select View Graph from the Patient History screen (page 162) to continue to the View Graph - Wound Area (cm²) screen.

A graph cannot be constructed if the patient history file has been deleted.

A graph cannot be constructed unless measurements of the wound area have been previously saved in the patient's history. At least two measurements from different days are required (area of the image against time) for a graph to be constructed. Refer to the Wound Imaging section (page 167) of this manual for complete details about entering this information in the patient's history.

2. Select Back to return to the Patient History screen.
Delete Patient History Screen

Use the **Delete Patient History** screen to delete patient history data from the V.A.C.ULTA™ Therapy Unit’s memory.

1. Select **Delete History** from the **Patient History** screen (page 162) to continue to the **Delete Patient History** warning screen.

2. Select **OK** to confirm deletion or **Cancel** to return to the **Patient History** screen without deleting patient history.

3. Once the deletion is complete, select **Exit** on the **Delete Successful** screen to return to the **Patient History** screen.
Wound Imaging

Use the Wound Imaging feature to aid in recording the wound healing process.

**Wound imaging area and volume calculation features are not intended to be exact measurements and are not intended for use in the diagnosis and treatment of wounds.**

Accessories required to use this feature include:

- Digital camera with at least two megapixel resolution and that uses an SD Memory Card
- An SD Memory Card
- Calibration Reference Square - located on the ruler in the dressing kit. This reference square is needed for the V.A.C.ULTA™ Therapy Unit to calculate wound measurements.

![Calibration Reference Square](image)

- Stylus - located inside the door on the front of the V.A.C.ULTA™ Therapy Unit (page 18).

**The touch screen should only be operated by finger or the supplied stylus. Using pens or other pointing devices will damage the screen and may affect correct device function.**

For optimal operation of the Wound Imaging feature, it is recommended that:

- A new sterile Calibration Reference Square be placed in the same location on the wound each time an image is taken.
- All images be taken directly above the wound.
- The wound and Calibration Reference Square fill as much of the image as possible.
- The image be taken in good lighting conditions.
- Image files must be in a JPEG (.jpg) format.

**Using a camera that has a date and time function will allow for easier tracking of images.**
Imaging Screen

Use the Imaging screen to upload images for calculating wound area and volume and to delete images from the V.A.C.ULTA™ Therapy Unit.

Uploading Images

1. From the History Tab screen (page 155), select Imaging to continue to the Imaging screen.

2. Enter Patient History access code (page 159).

   A Patient History Log must be created prior to using the Imaging feature. Refer to the Create New Patient History section (page 158) of this manual for more information.

3. Insert memory device into the proper slot on front of the V.A.C.ULTA™ Therapy Unit (page 18).

   Use only non-powered USB devices.

4. Select Select Image & Analyze to continue to the Upload Image screen.

5. Select the memory device that contains the images from the Upload Images screen. Select USB, SD Card, or Unit Memory.

   There will be short delay while the images are accessed from the V.A.C.ULTA™ Therapy Unit’s memory or the memory card.

   When selecting unit memory, the Select Image screen will be blank unless images have been previously uploaded and saved in unit memory.

6. Select OK to continue to the Select Image screen. Select Cancel to return to the Imaging screen.
7. Use the Up and Down arrows to display the desired folder or image in the window.

8. If the desired image is in a folder, display the available folders with the Up and Down arrows and select the desired Folder. Use the Up and Down arrows to display the desired image.

Select Back to back out of the folder.

9. When the desired image is displayed, select OK to load the image into the V.A.C.ULTA™ Therapy Unit’s memory.

10. The V.A.C.ULTA™ Therapy Unit will begin uploading the image. A bar graph will display transfer progress.

If the V.A.C.ULTA™ Therapy Unit detects an error during transfer, the Upload Transfer Error screen will appear. Refer to the Data Transfer Errors section (page 180) of this manual for information about resolving this error.
11. Once image is successfully transferred, remove the memory device.

12. Select **Exit** on the **Upload Successful** screen to continue to the **Touch Corners of Reference Square** screen.
Use the supplied stylus to touch each corner of the reference square displayed in the image window on the **Touch Corners of Reference Square** screen.

When the last corner of the reference square is touched, the corner points will be joined by a highlighted line.

**The touch screen should only be operated by finger or the supplied stylus. Using pens or other pointing devices will damage the screen and may affect correct device function.**

**It is important to select corners in either a clockwise or counter-clockwise manner. Incorrect sequence will lead to a calibration error.**

13. Once all the corners of the reference square have been touched, select **OK** to continue to the **Trace Wound Perimeter** screen.
1. Use the supplied stylus to trace a line around the wound area to be analyzed in the image window on the Trace Wound Perimeter screen.

If an error is made during tracing, select Reset to trace the wound area again.

The touch screen should only be operated by finger or the supplied stylus. Using pens or other pointing devices will damage the screen and may affect correct device function.

A square will appear at the start of the trace. The trace is completed when the end of the line returns to the start point.
2. Once the wound area has been traced, select OK to continue to the Add Imaging Area screen.

3. Select Add Area to continue back to the Trace Wound Perimeter screen if there is an additional wound area to be traced.

   OR

4. Select Continue if all wound area(s) have been traced.

5. Select OK to continue to the Image Area Depth screen.
1. Select the approximate depth of each wound area traced. Use + / -, as applicable to adjust above and below values shown.

2. Select Back to return to the Add Imaging Area screen.

3. Select OK to save wound imaging data to the patient’s history.

4. Select Cancel to return to the Upload Image screen.
1. From the **History Tab** screen (page 155), select **Imaging** to continue to the **Imaging** screen.

2. Enter Patient History access code.

3. Select **Manage Saved Images** to continue to the **Select Image for Deletion** screen.

4. Use the **Up** and **Down** arrows to display the desired image in the window.

5. When the desired image is displayed, select **OK** to continue to the **Confirm Delete** screen.

6. Select **Back** to return to the **Imaging** screen.
7. Select **OK** to delete the image from the V.A.C.ULTA™ Therapy Unit's memory.

OR

8. Select **Cancel** to return to the *Select Image for Deletion* screen.

9. Once the image is successfully deleted, the *Select Image for Deletion* screen will be displayed. Select another image to delete, or select **Back** to return to the *Imaging* screen.

10. Select the **History** Tab to return to the *History Tab* screen.
Therapy History Screen

The View Therapy History screen displays the patient’s therapy information in date, time and event columns (e.g. therapy starts / stops, therapy settings and disposable component changes). The date is in descending order and time is displayed using the twenty-four hour clock format.

1. From the History Tab screen (page 155), select Therapy History to continue to the View Therapy History screen.

2. Use the Up and Down arrows to scroll through the therapy history.

3. Select Back to return to the History Tab screen.

4. Select Export Therapy History to continue to the Export History screen (page 179).
Alarm History Screen

The View Alarm History screen displays alarm information for the V.A.C.ULTRA™ Therapy Unit in date, time and event columns (e.g. alarms and disposable component changes). The date is in descending order and time is displayed using the twenty-four hour clock format.

1. From the History Tab screen (page 155), select Alarm History to continue to the View Alarm History screen.

2. Use the Up and Down arrows to scroll through the alarm history.

3. Select Back to return to the History Tab screen.

4. Select Export Alarm History to continue to the Export History screen (page 179).
Export History Screen

Use the Export History screen to export therapy and alarm history to a memory device (USB or SD Card).

1. Insert the desired memory device (USB or SD Card) into the proper port on the front of the V.A.C.ULTA™ Therapy Unit (page 18).

   **Use only non-powered USB devices.**

2. From the History Tab screen (page 155), select Therapy History to continue to the View Therapy History screen.

3. Select Export Therapy History to continue to the Export History screen.

4. On the Export History screen, select the memory device being used, USB or SD Card.

5. Select OK to begin exporting history to the memory device or select Cancel to return to the View Therapy or Alarm History screen without exporting history.

6. The V.A.C.ULTA™ Therapy Unit will begin exporting history. A bar graph will display transfer progress.

   **If the V.A.C.ULTA™ Therapy Unit detects an error during transfer, the Export Transfer Error screen will appear. Refer to the Data Transfer Errors section (page 180) of this manual for information about resolving this error.**

7. Once all history is successfully transferred to the memory device, select Exit on the Export Successful screen to return to the History Tab screen.
Data Transfer Errors

If the V.A.C.ULTA™ Therapy Unit detects an error during data transfer, the unit will display a Transfer Error screen.

**The V.A.C.ULTA™ Therapy Unit is not compatible with USB Drives or SD Cards which have U3 software pre-installed. U3 software must be uninstalled prior to use.**

If the *Export Transfer Error* screen appears, the possible reasons for transfer errors are:

- SD Card / USB Drive not inserted properly.
- Incorrect SD card / USB drive format.
- Incorrect type of device connected.

1. Select **Reset** to return to try the export again.
2. Select **Exit** to cancel the export or to select a different destination device.

If the *Upload Transfer Error* screen appears, the possible reasons for transfer errors are:

- SD Card / USB Drive not inserted properly.
- Incorrect SD card / USB drive format.
- Incorrect type of device connected.
- V.A.C.ULTA™ Therapy Unit’s memory is full.

*If therapy unit’s memory is full, delete any unused photos to free memory. Refer to Delete Images section (page 175) for information on deleting images.*

1. Select **Reset** to return to try the upload again.
2. Select **Exit** to select a different image (page 168) or to exit Imaging.
Utilities Tab

Use the **Utilities Tab** screen to set preferences for the V.A.C.ULTA™ Therapy Unit.

Refer to pages 74, 106, 126 and 144 for details on features.

The following options are available from any therapy mode on the **Utilities Tab** Home screen:

- **Regional Settings** - Use to set the language, units of measure, number format and date format displayed by the V.A.C.ULTA™ Therapy Unit.

- **Screen Calibration** - Use to calibrate the V.A.C.ULTA™ Therapy Unit’s touch screen.

- **About and Contact Information** - Use to access information about the V.A.C.ULTA™ Therapy Unit, including the software version and KCI contact information.

- **Date and Time** - Use to set the current date and time.

- **Screen Brightness** - Use to adjust the brightness of the V.A.C.ULTA™ Therapy Unit’s touch screen.

- **Leak Alarm Threshold** - Use to set the leak rate threshold that triggers the Leak Alarm (V.A.C.® Therapy and V.A.C. VERAFLO™ Therapy only).

- **Help** - Use to access the V.A.C.ULTA™ Therapy Unit’s on-screen help features.
Regional Settings Screen

Use the Regional Settings screen to set the language, unit of measure, number format and date format displayed by the V.A.C.ULTA™ Therapy Unit.

1. Select the Utilities tab (page 181).

2. Select Regional Settings from the Utilities Tab screen (page 181) to continue to the Regional Settings screen.

3. Set the following options:
   - **Pressure Units** - Select between mmHg (millimeters of mercury) or kPa (kilo-Pascals).
   - **Length Units** - Select between cm (centimeters) or inch (inches).
   - **Instill Volume Units** - Select between mL (milliliters) or cc (cubic centimeters).
   - **Number Format** - Select decimal separator “.” or “,” (123.4 or 123,4).
   - **Date Format** - Select between DD/MM/YYYY or MM/DD/YYYY.
   - **Language** - Select the display language for the V.A.C.ULTA™ Therapy Unit.

4. Once all options have been selected, select OK to continue to the Confirm Regional Settings screen.

5. Select OK to confirm settings and return to the Utilities Tab screen. Select Cancel to return to the Regional Settings screen to make any required adjustments.
About and Contact Information Screen

Use the About and Contact Information screen to access information about the V.A.C.ULTRA™ Therapy Unit, including the software version and KCI contact information.

1. Select the Utilities tab (page 181).

2. Select About & Contact Information from the Utilities Tab screen (page 181) to continue to the About and Contact Information screen.
   - About - Shows current software version information
   - Contact Information - Shows KCI contact information

3. Select Back to return to the Utilities Tab screen.
Screen Calibration Screen

Use the **Screen Calibration** screen to calibrate the V.A.C.ULTRA™ Therapy Unit’s touch screen. If screen inputs are not correctly recognized, it may be necessary to calibrate the touch screen.

1. Select the **Utilities** tab (page 181).

2. Select **Screen Calibration** from the **Utilities Tab** screen (page 181) to continue to the **Screen Calibration** screen.

3. Select **OK** to begin calibrating the touch screen.

4. Using the supplied stylus, touch and hold the center of each cross as it is displayed on the touch screen.

*The touch screen should only be operated by finger or the supplied stylus. Using pens or other pointing devices will damage the screen and may affect correct device function.*
5. Once Step 4 of screen calibration is complete, the **Screen Calibration Complete** screen will appear. If necessary, select **Reset** on the **Screen Calibration Complete** screen to repeat calibration.

6. Select **OK** to return to the **Utilities Tab** screen.
Date & Time Settings Screen

Use the **Date & Time Settings** screen to set the current date and time.

1. Select the **Utilities** tab (page 181).

2. Select **Date & Time** from the **Utilities Tab** screen (page 181) to continue to the **Date & Time Settings** screen.

3. Set the following options:
   - **Day** - Select the current day. Use + / - to adjust above and below values shown.
   - **Month** - Select the current month. Use + / - to adjust above and below values shown.
   - **Year** - Select the current year. Use + / - to adjust above and below values shown.
   - **Hour** - Select the current hour of the current time. Use + / - to adjust above and below values shown.
   - **Minute** - Select the current minute of the current time. Use + / - to adjust above and below values shown.

4. Once all options have been selected, select **OK** to continue to the **Confirm Date & Time Settings** screen.

5. Select **OK** to confirm settings and return to the **Utilities Tab** screen. Select **Cancel** to return to the **Utilities Tab** screen without making any adjustments to the date and time.
Screen Brightness Screen

Use the **Screen Brightness** screen to adjust the brightness of the V.A.C.ULTA™ Therapy Unit’s touch screen.

1. Select the **Utilities** tab (page 181).

2. Select **Screen Brightness** from the **Utilities Tab** screen (page 181) to continue to the **Screen Brightness** screen.

3. Select the desired screen brightness - **Low**, **Medium**, or **High**.

4. Once the desired screen brightness has been selected, select **OK** to continue to the **Confirm Screen Brightness Settings** screen.

5. Select **OK** to confirm settings and return to the **Utilities Tab** screen. Select **Cancel** to return to the **Utilities Tab** screen without making any adjustments to the screen brightness.
Leak Alarm Threshold Screen

Use the **Leak Alarm Threshold** screen to set the leak rate threshold that triggers the Leak Alarm. This option is available in the V.A.C. VERAFLÔ™ Therapy and V.A.C.* Therapy modes only.

1. Select the **Utilities** tab (page 181).

2. Select **Leak Alarm Threshold** from the **Utilities Tab** screen (page 181) to continue to the **Leak Alarm Threshold** screen.

3. Select the desired negative pressure leak alarm threshold for V.A.C.* Therapy and V.A.C. VERAFLÔ™ Therapy. Threshold options are **Low** or **High**. Low is approximately equal to one liter per minute. High is approximately equal to two liters per minute.

4. Once the desired negative pressure leak alarm thresholds have been selected, select **OK** to continue to the **Confirm Leak Alarm Settings** screen.

5. Select **OK** to confirm settings and return to the **Utilities Tab** screen. Select **Cancel** to return to the **Utilities Tab** screen without making any adjustments to the negative pressure leak alarm thresholds.
Confirm Serial Number

This screen appears when the V.A.C.ULTA™ Therapy Unit is powered on and the serial number stored in the unit’s memory is corrupt or missing.

To resolve:

1. Compare serial number on unit’s serial number label (page 18) to displayed serial number.

2. If serial number is incorrect, use the on-screen keyboard to re-enter the unit’s serial number label.

3. Select OK to continue to the Startup screen.
Care and Cleaning

Standard Precautions

The following are the KCI recommended daily and weekly cleaning and infection control procedures for the V.A.C.ULTA™ Therapy Unit.

Always follow Standard Precautions.

Standard Precautions are designed to reduce the risk of transmission of microorganisms from both known and unknown sources of infection. These precautions can be applied to all patients, regardless of their diagnosis or presumed infection status, and should be used when contact is anticipated with blood and all body fluids. This also includes secretions and excretions (except sweat) regardless of whether blood is visible or not, non-intact skin (i.e., open wounds) and mucous membranes.

Waste Disposal

Discard all disposable items (all tubing, connectors, clamps, used canister, used dressings, etc.) in accordance with local medical waste disposal regulations. Improper disposal may run the risk of regulatory non-compliance.

Cleaning the V.A.C.ULTA™ Therapy Unit

Cleaning and disinfection of the V.A.C.ULTA™ Therapy Unit includes wipe down of all hard surface components. Follow institutional procedures used for cleaning and disinfection of other hard surface durable electronic medical equipment. The V.A.C.ULTA™ Therapy Unit must be cleaned and disinfected:

- If it becomes soiled during patient use.
- At least weekly.

Ensure that the V.A.C.ULTA™ Therapy Unit is powered off and disconnected from AC power when using cleaning fluids of any nature.

KCI recommends the following regarding cleaning and disinfecting KCI V.A.C.® Therapy devices:

- To help reduce risk of infection and contact with blood and body fluids, use personal protective equipment (PPE) such as medical procedure gloves.
- Clean all organic material (visible soil or body secretions) from the therapy unit prior to disinfection.
- Use hospital-grade cleaners and disinfectants.
- Do not immerse or saturate the therapy unit with fluids to avoid damage to the electronics in the device.
- Do not use alcohol based solutions around the touchscreen edges or near gasket and power switches since alcohol based solutions will easily wick up into the screen and may cause equipment malfunction.
Cleaning the Touch Screen

1. Select Lock on the Home screen (page 50, 85, 110 and 129) to activate Screen Guard. The Lock icon will close.

2. Use a soft, non-abrasive cloth to gently clean the touch screen.

   Do not use any liquid to clean the touch screen.

   Do not use excessive force to clean the touch screen. Pressing too hard may cause damage.

3. To unlock the touch screen, touch the screen to display the Screen Guard screen.

4. Select the 1, then the 2 on the Screen Guard screen to return to the Home screen.
Explanation of Symbols Used

Rx Only

CAUTION: Federal (US) law restricts this device to sale/rental by or on the order of a physician

Manufacturer

Important Operational Information

Refer to User Manual

CAUTION: Warning or Caution statement of possible hazard to system, patient or staff

IPX1

No protection against ingress of solid forcing objects. Protected against ingress of vertically dripping water.

Conforms with the Waste Electrical and Electronic Equipment Directive (2002/96/EC). At the end of useful life, dispose of all waste according to local requirements, or contact your local KCI subsidiary or agent for advice. This product is designated for separate collection at an appropriate collection point. Do not dispose of in normal waste stream.

IPX1

Authorized Representative in the European Community

Catalog Number

EC REP

ETL Listed, Conforms to AAMI ES60601-1 1st edition, CSA C22.2#60601-1 3rd edition and IEC 60601-1 3rd edition

Type BF Applied Part

MR Unsafe - Keep the V.A.C. ULTA™ Therapy Unit away from magnetic resonance imaging (MRI) equipment
Specifications

Specifications subject to change without notice.

Classification

Equipment not suitable for use in the presence of a flammable anesthetic mixture with air, oxygen or nitrous oxide, or an oxygen enriched environment.

V.A.C.ULTA™ Therapy Unit

Continuous Operation
Type BF Applied Part
Class I equipment
IPX1

Power Supply

Class I Equipment
Ordinary Equipment

V.A.C.ULTA™ Therapy Unit

Dimensions ............................................................................................................................................................ 217mm X 260mm X 191mm (8.55in X 10.25in X 7.5in)
Weight ..................................................................................................................................................................... 3.35kg (7.4 lbs)

Electrical Data (Power Supply)

External Power Supply Input: .................................................................................................................................................................................................... 100 - 240 VAC, 1.6A, 50Hz - 60Hz
External Power Supply Output ..................................................................................................................................................................................................................................................................................... 15V, 4.8A

Alarm Volume

Minimum of 72 dBA at 1 meter in maximum volume orientation.

Environmental Conditions

Transport and Storage Temperature Range .............................................................................................................................................................. -20 °C to 60 °C (-4°F to 140°F)
Operational Temperature Range ........................................................................................................................................................................ 10 °C to 30 °C (50°F to 86°F)
Relative Humidity Range ............................................................................................................................................................................... 10% to 85% non-condensing
Barometric Pressure Range ...................................................................................................................................................................... 700 hPa to 1060 hPa

Instill Pump Volumetric Accuracy

6 - 10 ml ± 2 ml
12 - 50 ml ± 20%
55 - 500 ml ± 15%

Accuracy Testing performed under the following conditions

Room Temperature .............................................................................................................................................................................................. 22.5°C ± 2°C
Solution ............................................................................................................................................................................................... 1000 mL bag of 0.9% saline fluid located on solution container hanger arm
Downstream pressure ............................................................................................................................................................................. 0 psi with discharge height at pump rotor centerline
Testing Duration ...................................................................................................................................................................................... V.A.C. VERALINK™ Cassette usage up to 72 hours

The disposable components of the V.A.C.ULTA™ Therapy System are considered Applied Parts under IEC 60601-1 Third Edition.
Electromagnetic Compatibility

Electromagnetic Interference - Although this equipment conforms with the intent of the directive 2004/108/EC in relation to Electromagnetic Compatibility (EMC), all electrical equipment may produce interference. If interference is suspected, move equipment away from sensitive devices or contact the manufacturer.

Portable and mobile RF communications equipment can effect medical electrical equipment.

Radios, cell phones and similar devices may affect this equipment and should be kept at least 6.5 feet (2 meters) away from the equipment.

Medical electrical equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information in the following tables.

Other medical equipment or systems can produce electromagnetic emissions and therefore can interfere with the functionality of the V.A.C.ULTA™ Therapy Unit. Care should be used when operating the V.A.C.ULTA™ Therapy Unit adjacent to or stacked with other equipment. If adjacent or stacked use is necessary, the V.A.C.ULTA™ Therapy Unit should initially be observed to verify normal operation in the configuration in which it will be used.

The following tables document compliance levels and guidance from the IEC 60601-1-2 2007 Standard, for the electromagnetic environment in which the V.A.C.ULTA™ Therapy Unit should be used in a clinical environment.

<table>
<thead>
<tr>
<th>Emission Test</th>
<th>Compliance</th>
<th>Electromagnetic environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF emissions CISPR 11</td>
<td>Group 1 Class A</td>
<td>The V.A.C.ULTA™ Therapy Unit 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</td>
</tr>
<tr>
<td>Conducted emissions CISPR 11</td>
<td>Group 1 Class A</td>
<td></td>
</tr>
<tr>
<td>Harmonic emissions IEC 61000-3-2</td>
<td>Class A</td>
<td></td>
</tr>
<tr>
<td>Voltage fluctuations / flicker emissions IEC 61000-3-3</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
### Guidance and Manufacturer’s Declaration - Electromagnetic Immunity

The V.A.C.ULTA™ Therapy Unit is intended for use in the electromagnetic environment specified below. The customer or user of the V.A.C.ULTA™ Therapy Unit should assure that it is used in such an environment.

<table>
<thead>
<tr>
<th>Immunity Test</th>
<th>IEC 60601 Test Level</th>
<th>Compliance level</th>
<th>Electromagnetic Environment Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrostatic discharge (ESD) IEC 61000-4-2</td>
<td>±6kV Contact ±8kV Air</td>
<td>±6kV Contact ±8kV Air</td>
<td>In accordance with IEC 60601-1-2: 2007, floors are covered with synthetic material, the relative humidity should be at least (30%).</td>
</tr>
<tr>
<td>Electrical fast transient / burst IEC 61000-4-4</td>
<td>±1kV Cables ±2kV Power</td>
<td>±1kV Cables ±2kV Power</td>
<td></td>
</tr>
<tr>
<td>Surge IEC 61000-4-5</td>
<td>±1kV line(s) to line(s) ±2kV line(s) to earth</td>
<td>±1kV line(s) to line(s) ±2kV line(s) to earth</td>
<td></td>
</tr>
<tr>
<td>Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11</td>
<td>5% half cycle 40% 5 cycles 70% 25 cycles 5% for 5 seconds</td>
<td>5% half cycle 40% 5 cycles 70% 25 cycles 5% for 5 seconds</td>
<td></td>
</tr>
<tr>
<td>Power frequency (50Hz / 60Hz) magnetic field IEC 61000-4-8</td>
<td>3A/M</td>
<td>3A/M</td>
<td>Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.</td>
</tr>
</tbody>
</table>

**NOTE:** Ur is the a.c. mains voltage prior to application of the test level.

### Recommended separation distances between portable and mobile RF communications equipment and the V.A.C.ULTA™ Therapy Unit

The V.A.C.ULTA™ Therapy Unit is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the V.A.C.ULTA™ Therapy Unit can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the V.A.C.ULTA™ Therapy Unit as recommended below, according to the maximum output power of the communications equipment.

<table>
<thead>
<tr>
<th>Rated maximum output power of transmitter (W)</th>
<th>Separation distance according to frequency of transmitter</th>
<th>150 kHz to 80 MHz</th>
<th>80 MHz to 800 MHz</th>
<th>800 MHz to 2.5 GHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>d = 1.2 √P</td>
<td>d = 1.2 √P</td>
<td>d = 2.3 √P</td>
<td></td>
</tr>
<tr>
<td>0.01</td>
<td>0.12</td>
<td>0.12</td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td>0.1</td>
<td>0.38</td>
<td>0.37</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>3.8</td>
<td>3.7</td>
<td>7.4</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>12</td>
<td>12</td>
<td>23</td>
<td></td>
</tr>
</tbody>
</table>

For transmitters rated at a maximum output power not listed above, the recommended separate distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power 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 surfaces, objects and people.
# Guidance and Manufacturer’s Declaration - Electromagnetic Immunity

The V.A.C. ULTRA™ Therapy Unit is intended for use in an electromagnetic environment specified below. The customer or user of the V.A.C. ULTRA™ Therapy Unit should assure that it is used in such an environment.

<table>
<thead>
<tr>
<th>Immunity Test</th>
<th>IEC 60601 Test Level</th>
<th>Compliance Level</th>
<th>Electromagnetic Environment Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducted RF</td>
<td>IEC 61000-4-6</td>
<td>3Vrms 150K - 80 MHz</td>
<td>Portable and mobile RF communications equipment should be used no closer to any part of the V.A.C. ULTRA™ Therapy Unit, including cables, than the recommended separation distance calculated from the equation application to the frequency of the transmitter.</td>
</tr>
<tr>
<td>Radiated RF</td>
<td>IEC 61000-4-3</td>
<td>3V/meter 80 MHz - 2.5 GHz</td>
<td>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:</td>
</tr>
</tbody>
</table>

\[ d = 1.2 \sqrt{P} \]

- **80 MHz to 800 MHz**
- **800 MHz to 2.5 GHz**

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).

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 structures, objects and people.

1 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 V.A.C. ULTRA™ Therapy Unit is used exceeds the applicable RF compliance level above, the V.A.C. ULTRA™ Therapy Unit should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the V.A.C. ULTRA™ Therapy Unit.

2 Over the frequency range 150kHz, field strengths should be less than 3V/m.
<table>
<thead>
<tr>
<th>Power Cord</th>
<th>Description</th>
<th>Cord Specifications</th>
<th>Max Length (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>350084</td>
<td>Cord, VAC Ultra AC Power</td>
<td>3 x 18 AWG, SJT, 10A / 125V</td>
<td>78.74</td>
</tr>
<tr>
<td>360080</td>
<td>Cord, VAC Via Power, IT-220V</td>
<td>H05VV-F-3G, 10A / 250V</td>
<td>79.00</td>
</tr>
<tr>
<td>360074</td>
<td>Cord, VAC Via Power, EU-220V</td>
<td>H05VV-F-3G, 10A / 250V</td>
<td>79.00</td>
</tr>
<tr>
<td>350753</td>
<td>Cord, VAC Ultra Power, UK-240V</td>
<td>H05VV-F-3G, 10A / 250V</td>
<td>78.74</td>
</tr>
<tr>
<td>350758</td>
<td>Cord, VAC Ultra Power, DK-220V</td>
<td>H05VV-F-3G, 10A / 250V</td>
<td>78.74</td>
</tr>
<tr>
<td>360081</td>
<td>Cord, VAC Via Power, CH-220V</td>
<td>H05VV-F-3G, 10A / 250V</td>
<td>79.00</td>
</tr>
<tr>
<td>360122</td>
<td>Cord, VAC Via Power South Africa / India</td>
<td>H05VV-F-3G, 10A / 250V</td>
<td>79.00</td>
</tr>
<tr>
<td>360076</td>
<td>Cord, VAC Via Power, AU / NZ-240V</td>
<td>H05VV-F-3G, 10A / 250V</td>
<td>79.00</td>
</tr>
<tr>
<td>4103887</td>
<td>Cord, Power Brazil</td>
<td>H05VV-F-3G, 10A / 250V</td>
<td>79.00</td>
</tr>
</tbody>
</table>

The use of electrical cables and accessories other than those specified in this manual or referenced documents may result in increased electromagnetic emissions from the V.A.C.ULTA™ Therapy Unit or decreased electromagnetic immunity of the V.A.C.ULTA™ Therapy Unit.

Customer Contact Information

For questions regarding this product, supplies, maintenance, or additional information about KCI products and services, please contact KCI or a KCI authorized representative, or:

**In the US** call 1-800-275-4524 or visit www.acelity.com, www.veraflo.com or www.vaculta.com
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**Outside the US** visit www.kci-medical.com