Operation / Service Technical Manual

NOTE: Electronic copies available at www.dabir-surfaces.com/IFU

Applicable Product Families:

Dabir Patient Care ***Plus***™ System (Facility Use Only)

Dabir Patient Care™ System (Facility Use Only)

Applicable Model Numbers:

Controllers & Accessories (C2-XXXX)

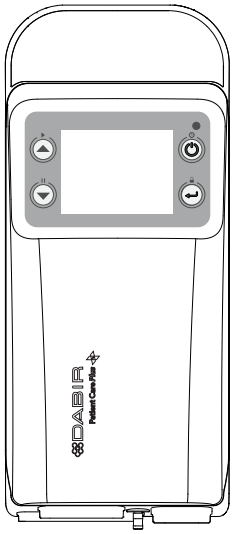
Surfaces (D2-XXXXXX-XX-XX)

Visit: www.dabir-surfaces.com/models for a complete list of model numbers

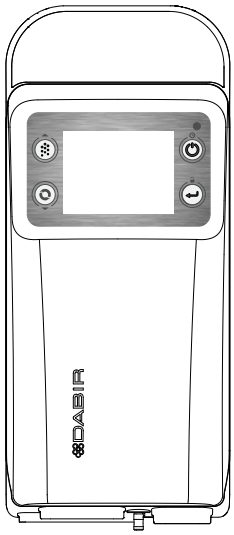
Controllers

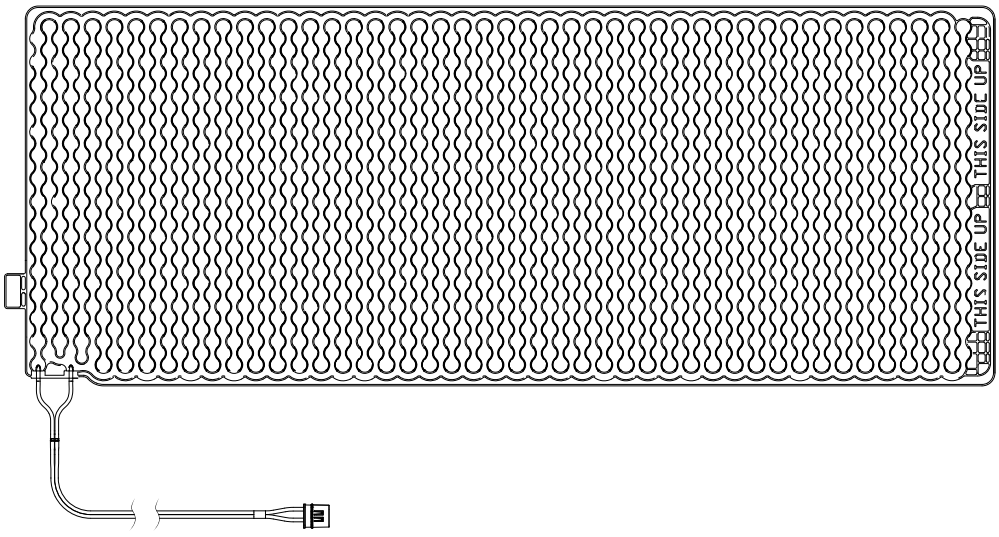
Surfaces

Patient Care *Plus*™ System



Patient Care™ System





NOTE: Controller & Surfaces not to scale

DOC# R02-0006-00061-LA

1.0 Table of Contents

1.1 Important Before You Start

Please read this manual carefully and completely before using Dabir products. Failure to do so may result in decreased performance or product failure. The "system" or "device" is defined as the controller & surface.

1.2 System Warnings

- Do NOT place the controller on the surface with patient.
- Surfaces are intended to be used ABOVE an underlying bed mattress with good pressure redistribution properties over the full patient contact area.
- Always place the surface ABOVE the mattress and cover it with a bed linen. (Surfaces are NOT intended to be used in direct contact with the patient's skin.)
- Therapy is NOT provided unless the controller is powered "ON" and the surface is active.
- It is the responsibility of the user to secure and protect against patient movement and/or falls.
- Always remove patient from surface prior to cleaning.
- After cleaning / disinfecting, allow surface adequate time to fully dry before storing and patient use.
- Notice: Any serious incident that has occurred in relation to the device should be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established.

1.3 System Cautions

- It is the responsibility of the user to properly clean and disinfect the system prior to patient use.
- Only use Dabir approved cleaning agents as outlined in Section 7. Damage may occur otherwise.
- It is the responsibility of the user with medical knowledge to operate this product safely in accordance with these instructions.
- Only use Dabir certified controllers, surfaces and accessories when operating this system.
- Surfaces are imaging compatible when the controller and surface connector are placed outside the field of view.
- Do NOT operate the system in the presence of flammable liquids or gases.
- Small parts present a choking hazard.
- Prior to use, allow one hour for the system to acclimate to room temperature.
- Do NOT use product if damaged.
- Do NOT transport the controller with surface attached.
- Power "OFF" controller before replacing surface.
- Do NOT autoclave.
- To avoid depressurization noise, do NOT unplug surface connector while the system is activated.
- Powering "OFF" or "PAUSING" the controller after the preprogrammed surface life has expired will automatically force surface replacement.
- Properly route and secure all Cords and Hoses to avoid trip hazard or damage.
- Modification of the device voids warranty and may compromise intended function.
- Reference specific accessory instruction manuals when applicable.
- Do NOT use petroleum based lubricants on seals as it may cause swelling and/or leakage.
- Stop therapy and notify user if patient experiences discomfort related to this device.
- SHOCK HAZARD: Always ensure power cord is fully inserted into grounded wall outlet.
- SHOCK HAZARD: DO NOT SUBMERGE. Immediately unplug the Power Cord from the wall outlet to disable.

1.4 Specific Component Cautions

Controller Cautions:

- Use of controller is NOT recommended around medical equipment that intentionally radiates energy.
- Maintain accessibility to Power Cord such that it can be easily unplugged prior to cleaning and/or servicing.
- Always turn the controller "OFF" during patient transfer, cleaning and before patient positioning.
- Power "OFF" or "PAUSE" the controller for cardiac arrest events. (NOT intended for use during CPR. See Section 5)
- Do NOT place the controller in direct sunlight.
- Only use specified operating wall currents. Alternative power sources and wall currents may result in irreparable damage to the controller and a possible hazardous event.
- Do NOT use with extension cords.
- Do NOT allow liquids or loose particle debris to enter or block any part of the controller. (See Section 7)
- It is the responsibility of the user to adequately secure the controller to prevent damage.

Surface Cautions:

- Always install cover linen and incontinence pads ABOVE the Dabir surface.
- Keep surface vents and connectors free of liquids or loose particle debris which may restrict air flow.
- Sharp objects from any source may damage the surface and compromise function. If damaged, replace immediately.
- It is the responsibility of the user to properly dispose of the surface when damaged or soiled.
- If fluid is ever visible inside of the surface, hose or in-line filter (model dependent), the surface must be replaced.

1.5 Labels & Descriptions

The symbols below appear on the controller, surfaces, accessories and/or packaging.

Label	Description
	**UL Mark** ANSI/AAMI ES60601-1 AMD (2012), "Medical Electrical Equipment - Part 1: General Requirements for Basic Safety and Essential Performance, Amendment 1" CAN/CSA-C22.2 No. 60601-1 (2014), "Medical Electrical Equipment - Part 1: General Requirements for Basic Safety and Essential Performance
	**UL Badge** Indicates UL compliance on marketing, advertising, and packaging materials
	**Non-Sterile** Indicates a medical device that has NOT been subjected to a sterilization process.
	**Caution** Alerts the reader of a potentially hazardous situation which, if NOT avoided, may result in minor or moderate injury to the user or patient or damage to the product or other property. This includes special care necessary for the safe and effective use of the device and the care necessary to avoid damage to the device that may occur as a result of use or misuse.
	**Manufacturer** Indicates the medical device manufacturer.
 YYYY-MM-DD	**Date of Manufacture** Indicates the date when the medical device was manufactured.
	**Separate Collection** Separate collection for electronic waste required.
	**Follow instructions for use**
	**Defibrillation-proof Type BF Applied Part** Indicates a defibrillation-proof type BF applied part complying with IEC 60601-1.
 YYYY-MM-DD	**Use-by Date** Indicates the date after which the medical device is NOT to be used.
	**Medical Device** Indicates that the device is a medical device.

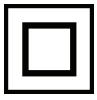
1.5 Labels & Descriptions - Continued

The Symbols below appear on the controller, surfaces, accessories and/or packaging.

Label	Description
IP33	**Level of Ingress Protection Against Solid Foreign Objects and Liquids**
	**This Way Up** Indicates a medical device that can be broken or damaged if NOT handled in a specific orientation.
	**Keep Dry** Indicates a medical device that needs to be protected from moisture.
	**Fragile, Handle With Care** Indicates a medical device that can be broken or damaged if NOT handled carefully.
	**Humidity Limitation** Indicates the range of humidity to which the medical device can be safely exposed.
	**Atmospheric Pressure Limitation** Indicates the range of atmospheric pressure to which the medical device can be safely exposed or operated in.
	**Temperature Limit** Indicates the temperature limits to which the medical device can be safely exposed or operated in.
SN	**Serial Number** Indicates the manufacturer's serial number so that a specific medical device can be identified.
#	**Model Number** Indicates the manufacturer's model number so that the medical device can be identified
LOT	**Batch Number** Indicates the manufacturer's batch code.
	**Alternating Current** Indicates that the equipment is suitable for alternating current only.
	**Power "ON" & "OFF"** Indicates where to power the controller "ON" and "OFF".
 Li-Ion	**Rechargeable Lithium-ion Battery** Indicates that the battery pack is lithium-ion and is rechargeable.

1.5 Labels & Descriptions - Continued

The Symbols below appear on the controller, surfaces, accessories and/or packaging.

Label	Description
	**FCC Declaration of Conformity** Certifies that the electromagnetic interference from the device is under limits approved by the Federal Communications Commission.
	**Non-ionizing Electromagnetic Radiation** Indicates equipment in the medical electrical area that includes RF transmitters.
	**CE Mark for European Conformity** The CE marking is the manufacturer's declaration that the product meets the requirements of the applicable CE directives.
	**European Authorized Representative** Legal entity for non-EU manufacturers that represents them in the EU to ensure their compliance with the European directives.
	**Double Insulated** Indicates the device is Class II Double Insulated

1.6 About this Manual

This manual is your introduction to the Dabir Patient Support System. Please read and follow these recommended installation / operation guidelines closely. (Accessory instructions are supplied separately.)

1.7 Indications for Use

The Dabir Patient Support System is indicated for:

- Pressure ulcer (injury) prevention when combined with a comprehensive wound prevention plan.
- **BEDS, STRETCHERS & CRIBS**: Use with patients weighing 15 to 600 lbs. ABOVE a bed mattress with good pressure redistribution properties and full patient support contact area.

NOTE: Adequate positioning measures MUST be taken to secure patients against movements and/or falls, especially during extreme positioning.

1.8 Contraindications

- Do NOT use the Dabir Patient Support Systems for patients with unstable spinal fractures or burns.

2.0 About the Dabir System

The Dabir "Patient Care" system enhances skin perfusion and protects against pressure injury through alternating micro-repositioning and tissue off-loading.

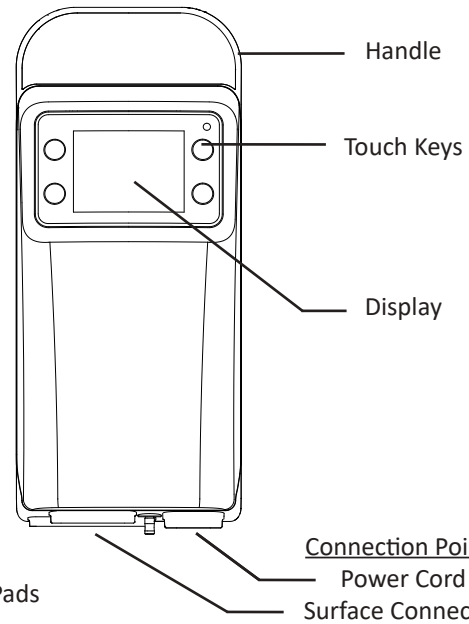
Controller Features:

- Easy Power Activation
- Auto-Start with System "PAUSE"
- Smart Connection System
- Intuitive Display
- Variable Cycle Speed Settings

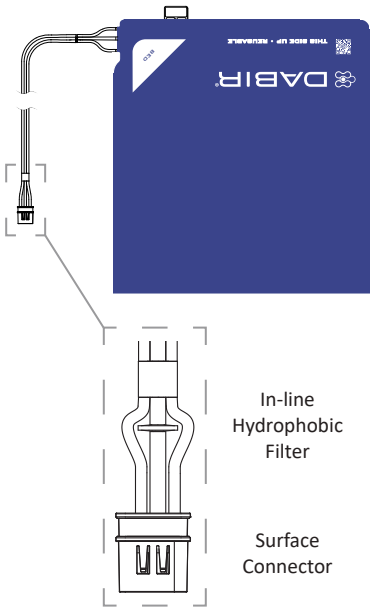
Patient Care *Plus* Surface:

- **Multi-Patient Use / Semi-Disposable**
- Alternating Nodal Tissue Relief with Reduced Skin Shear
- Easy Wipe-down Cleaning
- 1" (25mm) Fully Inflated
- Includes an in-line hydrophobic filter. (Biohazard indicator for replacement)
- Patient transfer / Anti-bunching capability
- Installs ABOVE Standard Mattresses
- Covers with Standard Linens & Incontinence Pads

Controller



Surfaces



NOTE: Dabir "Patient Care" family of surfaces are available as service parts only.

Accessories

- Unless otherwise noted, individual accessory instructions are provided in component packaging.
- Only use Dabir certified controllers, surfaces and accessories when operating this system.

2.1 How it Works

Dabir Technology was developed on the principle of supporting a patient on small, closely spaced areas of contact (nodes) that dynamically alternate in height to relieve at-risk tissue against pressure injury/ulcer formation. The aim is to preserve the circulatory components of arterial, venous and lymphatic blood flow in between these areas of contact.

Skin Shear

By shortening the distance between areas of contact, vertical patient movement and skin stretch during alternating support cycles and bed mattress immersion is reduced, thus decreasing the negative impact of skin shear. The result of the alternating cycles without lifting the body in effect, releases any stretched skin which allows previously compressed tissue to naturally reposition and reperfuse.

Alternating Pressure / Duration

Dabir surfaces achieve alternating micropressure support and tissue relief using independent rows of small, inflatable nodes which cycle up and down to promote healthy interstitial blood flow between individual areas of contact.

Low Profile & Self Contouring

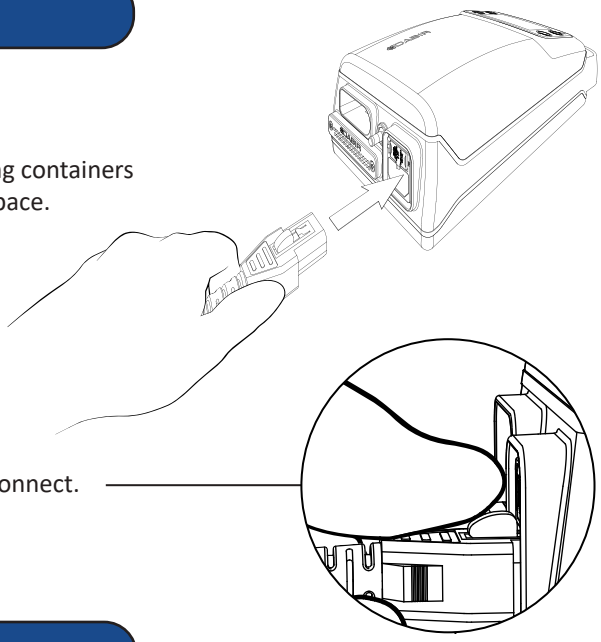
Dabir surfaces are designed to be thin and flexible so that they do NOT impact the overall height of the mattress. They also contour to the shape of the patient during immersion, which provides the broad pressure redistribution support needed for optimized Dabir therapy. The end result is improved ergonomics for caregivers during manual patient turning, transfer, and bed exit given the unchanged relative bed height with the Dabir surface.

3.0 Controller Pre-Assembly

Simple 2-Step Pre-Assembly:

BEFORE YOU START: Remove components from their individual packaging containers and place on a flat, stable surface (table or bench) with adequate work space. (No tools required.)

1. Insert latching Power Cord as shown.
2. Confirm proper insertion with a slight pull.



NOTES:

- Specific accessory instructions provided separately.
- User must depress the latching power cord RELEASE BUTTON to disconnect. (Do NOT force removal. See Section 3.4 for further instruction.)

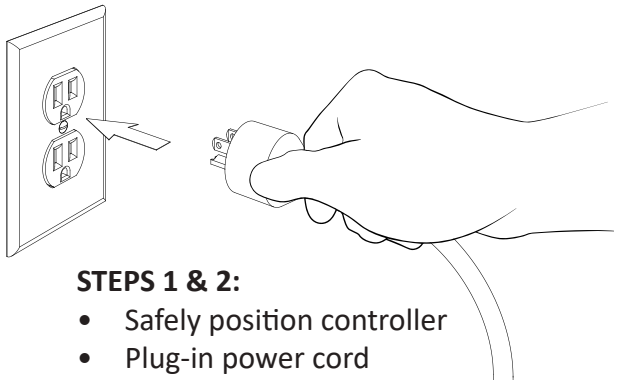
3.1 System Installation - Controller

Controller Mounting: Horizontal "Table Top" Installation

BEFORE YOU START: Place controller in a safe, stable location near a wall power outlet and at an appropriate distance from the patient care area. The controller includes four (4) rubber feet for added stability.

Please refer to specific Accessory Guides for alternative Controller mounting options.

1. Route the Power Cord such that it does NOT present a trip hazard.
2. Plug the Power Cord into an AC wall outlet or other power source with appropriate currents and protective earth ground.



STEPS 1 & 2:

- Safely position controller
- Plug-in power cord

⚠ IMPORTANT INSTALLATION RELATED NOTES:

WARNINGS:

- Do NOT place the controller on the surface with the patient.

CAUTIONS:

- Prior to use, allow one hour for controller to acclimate to room temperature.
- Use of controller is NOT recommended around medical equipment that intentionally radiates energy.
- Only use specified operating wall currents. Alternative power sources and wall currents may result in irreparable damage to the controller and a possible hazardous event.
- Do NOT use with extension cords.
- SHOCK HAZARD: Always ensure power cord is fully inserted into grounded wall outlet.

3.2 System Installation - Surfaces

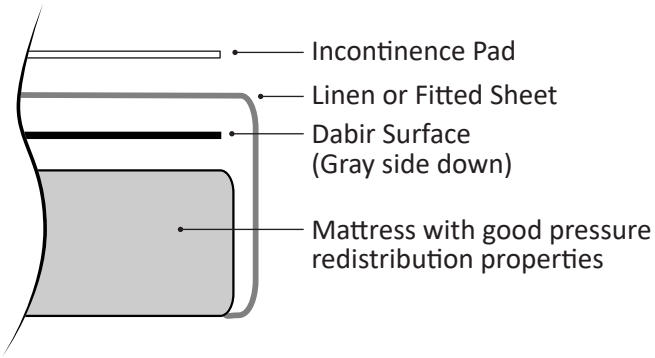
ICU / Med-Surg Surface Installation:

1. Place surface onto flat mattress with “THIS SIDE UP” facing up (gray side down) and secure optional corner straps when applicable. (Surface should lay flat when properly installed.) Hose exit orientation is optional depending on the desired set-up.

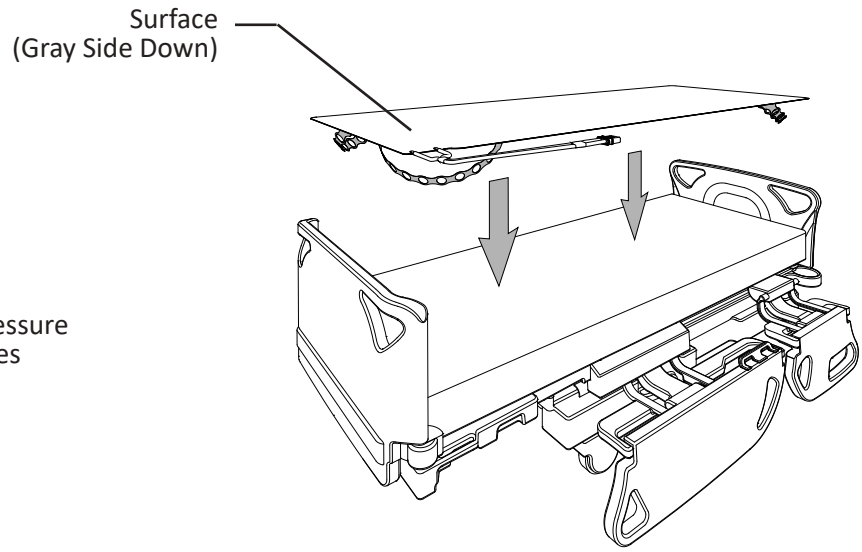
2. Place facility supplied linen and incontinence pad(s) over the top of the surface and tuck edges underneath the mattress. Avoid wrinkles whenever possible to optimize Dabir performance and patient comfort.

NOTE: Depending on model, various top layers and strap designs may apply.
NOTE: Use up to 2 standard incontinence pads above the bed linen for increased patient comfort.
NOTE: Surfaces are imaging compatible when the controller is placed outside of the imaging area.
NOTE: Patient Care ***Plus*** surfaces have a three lumen hose configuration, where Patient Care surfaces have only two.

Example:

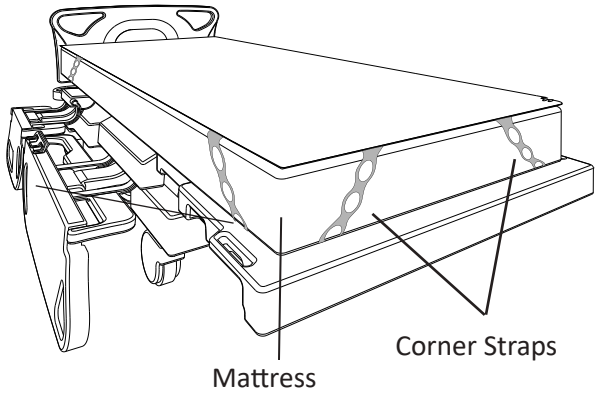


Bed Installation Diagram



Example: Optional Corner Strap Use

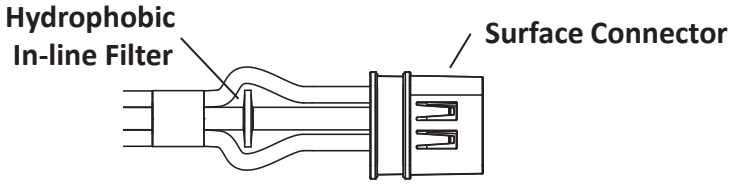
- Secure optional corner straps as shown before placing cover linen **ABOVE** the Dabir surface.



⚠ IMPORTANT INSTALLATION NOTES:

CAUTIONS:

- Always install cover linen and incontinence pads ABOVE the Dabir surface.
- Sharp objects from any source may damage the surface and compromise function. If damaged, replace immediately.
- If fluid is ever visible inside of the surface, hose or in-line filter (model dependent), the surface must be replaced.
- To prevent occlusion, always avoid tight bends when routing the hose. (Minimum 6" bend radius)



NOTE: Do NOT bend this section of the hose.

3.2 System Installation - Surfaces (Continued)

IMPORTANT SURFACE RELATED NOTES:

WARNINGS:

- **Surfaces are intended to be used ABOVE a underlying bed mattress with good pressure redistribution properties over the full patient contact area. (Never place surface directly on bed frame!)**
- **Always place the surface ABOVE the mattress and cover it with a bed linen. (Surfaces are NOT intended to be used in direct contact with the patient's skin.)**
- **It is the responsibility of the user to secure and protect against patient movement and/or falls.**

CAUTIONS:

- It is the responsibility of the user to properly clean and disinfect the system prior to patient use.
- Properly route and secure all Cords and Hoses to avoid trip hazard or damage.
- Do NOT use petroleum based lubricants on seals as it may cause swelling and/or leakage.
- Keep surface vents free of any liquids or loose particle debris which may restrict air flow. ("Patient Care" Surfaces ONLY)
- Surfaces are imaging compatible when the controller and surface connector are placed outside the field of view.

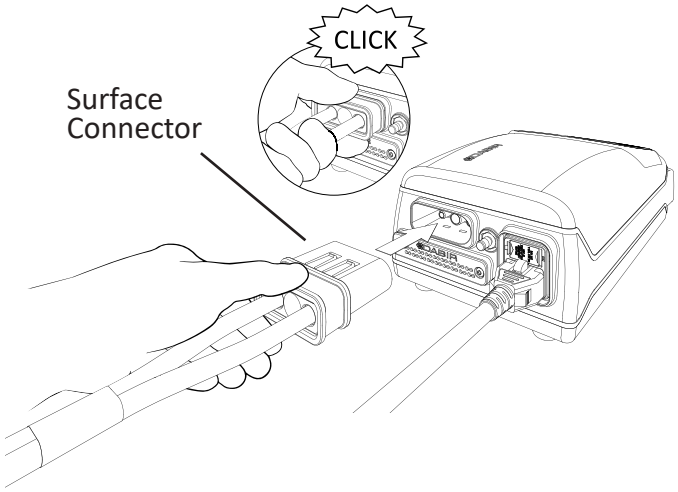
3.3 System Installation - Surface Connections

BEFORE YOU START: Place controller in a safe, stable location near a wall power outlet and at an appropriate distance from the patient care area.

Surface Connection Procedure:

1. Insert surface connector as shown.
2. Listen for an insertion "CLICK" to confirm a proper connection is made.

NOTE: Therapy will start automatically when powered "ON".



Surface Disconnect Procedure:

1. Grip surface connector and pull to release.

NOTE: System will alert if the surface is disconnected while in use.

IMPORTANT CONNECTION NOTES:

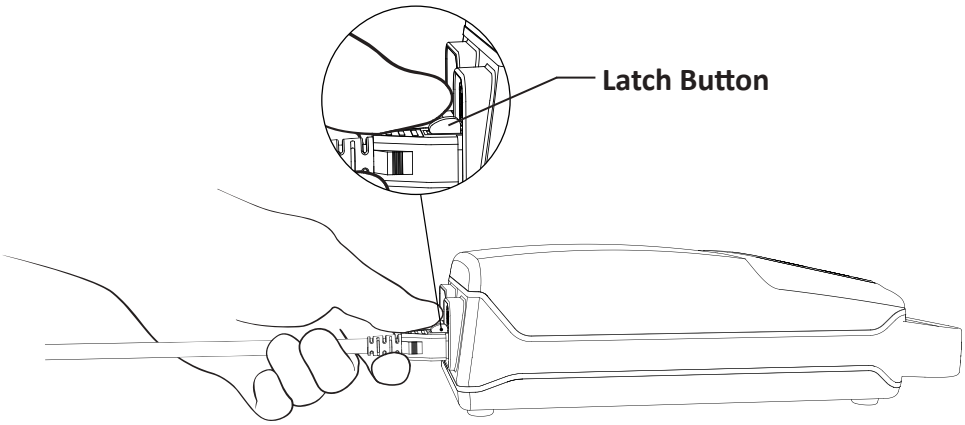
CAUTIONS:

- To avoid depressurization noise, do NOT unplug surface connector while system is activated.
- Do NOT transport the controller with the surface attached.
- Do NOT operate the system in the presence of flammable liquids or gases.
- Power "OFF" controller before replacing surface.
- If fluid is ever visible inside of the surface, hose or in-line filter (model dependent), the surface must be replaced.

3.4 Power Cord Disconnect

Power Cord Disconnect Procedure:

1. Unplug power cord from the wall outlet.
2. Disconnect the surface connector from the controller. (Section 3.3)
3. To remove the latching power cord: (a) push the plug forward into the controller, (b) depress and hold the latch button, while (c) simultaneously pulling the cord out from the controller.



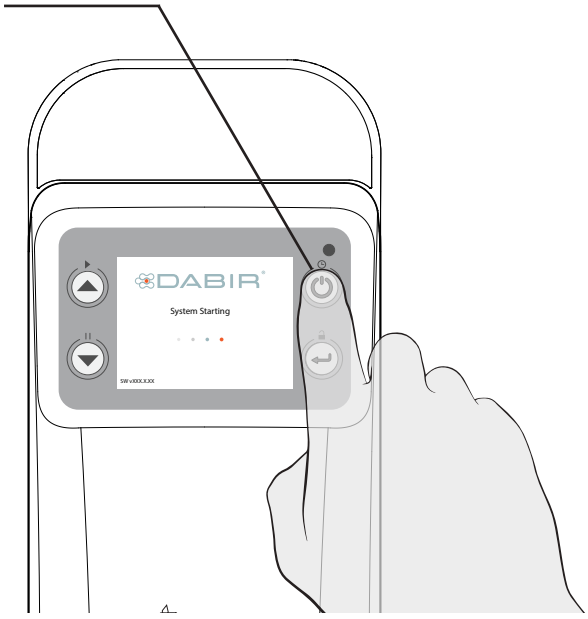
SERVICE NOTE:
If the mating latch feature on the controller is damaged, see Section 8.2b for instructions on "FUSE DRAWER" replacement.

STEP 3: Press Power Cord release button and pull to disconnect.

4.0 General Operation & Settings

Powering the Controller "ON":

1. Connect AC power to the controller. (Section 3.2)
2. To power the controller "ON", touch and hold the "POWER" key until "START-UP" screen appears. (Approximately 2 seconds)

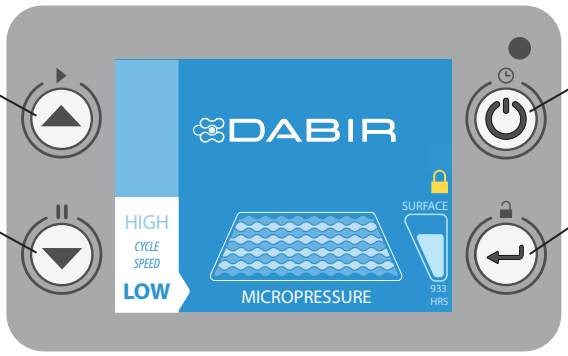


NOTE:
The controller will temporarily display an animated screen before automatically starting therapy.
(When surface is connected.)

4.1 General Operation & Settings - Main Screen Display

Getting familiar with the Controller User Interface (UI) keys: (Two UI variants shown)

Patient Care *Plus* Controller User Interface



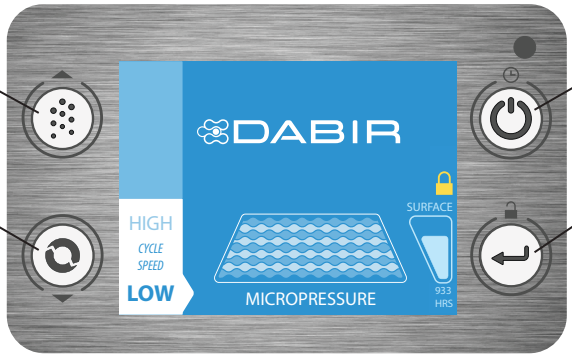
"UP ARROW"
Used to navigate the menu display

"DOWN ARROW"
Used to navigate the menu display

"POWER"
"ON", "OFF" and "PAUSE"

"SELECT"
"MENU" confirmation and "KEY LOCK" mode

Patient Care Controller User Interface



"MICROCLIMATE"
Feature NOT available at this time

"MICROPRESSURE"
"LOW" and "HIGH" alternating cycle speeds

"POWER"
"ON", "OFF" and "PAUSE"

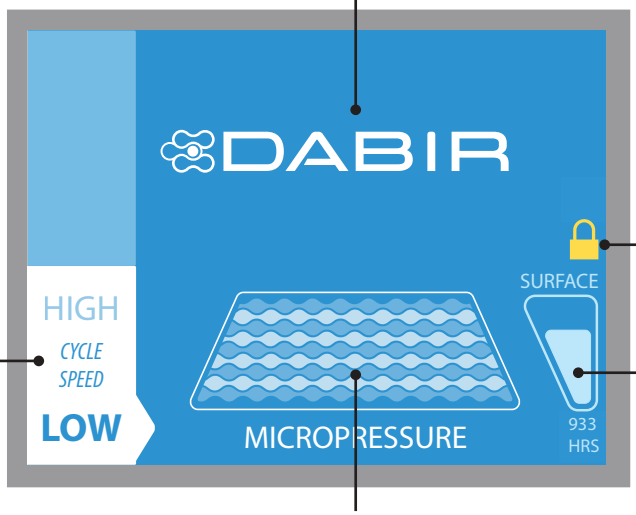
"SELECT"
"MENU" confirmation and "KEY LOCK" mode

MAIN SCREEN: Displays current "OPERATION SETTINGS"

Main Screen Information Center & Status Indicators:

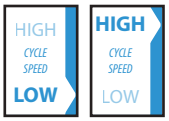
Various display icons are used as "Status Indicators" to enhance user experience.

Information Center



Alternating Surface Cycle Speed

Two Settings



(Default = LOW)

"KEY LOCK"
(Active when present)

"SURFACE LIFE"
Displays remaining life.
(Replace upon expiration)

Surface Animation

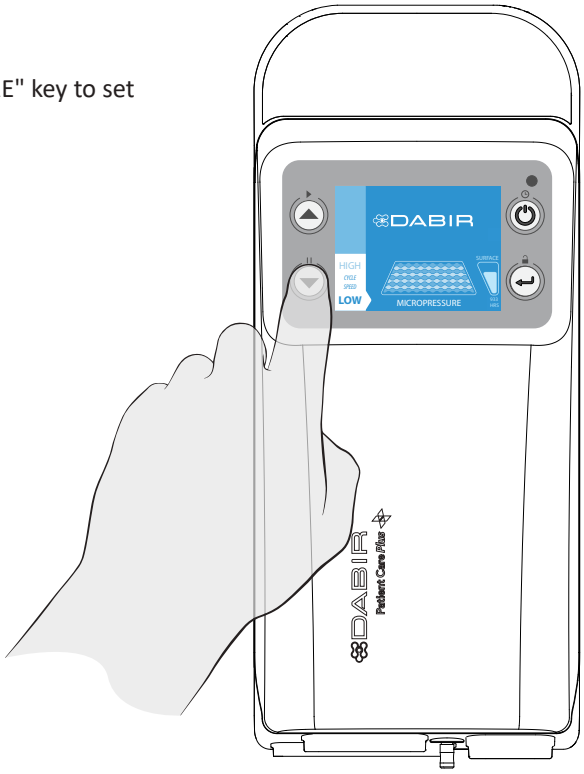
NOTE: Dabir alternating therapy is being applied whenever the display "MAIN SCREEN" shown above is "Blue".

4.2 General Operation & Settings - Cycle Speed

Customizing cycle speed setting:

1. Depending on your model, touch the "DOWN ARROW" or "MICROPRESSURE" key to set desired cycle speed:

   LOW: Slower Alternating Cycle (Default)
   HIGH: Faster Alternating Cycle



NOTES:
- All settings will provide effective Dabir therapy.
- System defaults are recommended for most applications.
- Cycle speeds will vary by surface model.

⚠ IMPORTANT OPERATION NOTES:

WARNING:

- Therapy is NOT provided unless the controller is powered "ON" and the surface is active.

CAUTION:

- It is the responsibility of the user with medical knowledge to operate this product safely in accordance with these instructions.

5.0 Options Menu - Resume, Pause, & Shutdown

Navigating the "OPTIONS" Menu:

1. From the "MAIN SCREEN", touch and hold "POWER" key  to enter the "OPTIONS" menu.

NOTE: There is a slightly longer "hold delay" on this key touch to prevent accidental shutdowns. If no menu selections are made within 10 seconds, the display will automatically return back to the "MAIN SCREEN" with no interruptions in therapy.

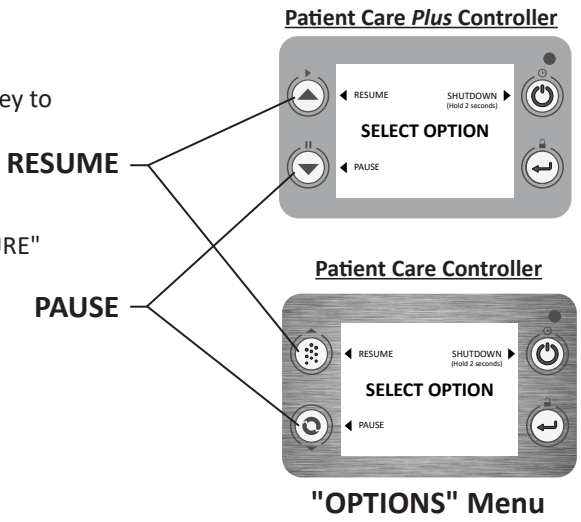
5.0 Options Menu - Resume, Pause & Shutdown - Continued

Selecting within the "OPTIONS" Menu: (Continued)

Depending on your model, touch the "UP ARROW" or "MICROCLIMATE" key to immediately "RESUME" operation.

Depending on your model, touch the "DOWN ARROW" or "MICROPRESSURE" key to immediately "PAUSE" operation.

Touch and hold the "POWER" key for 2 seconds to initiate "SHUTDOWN" process.



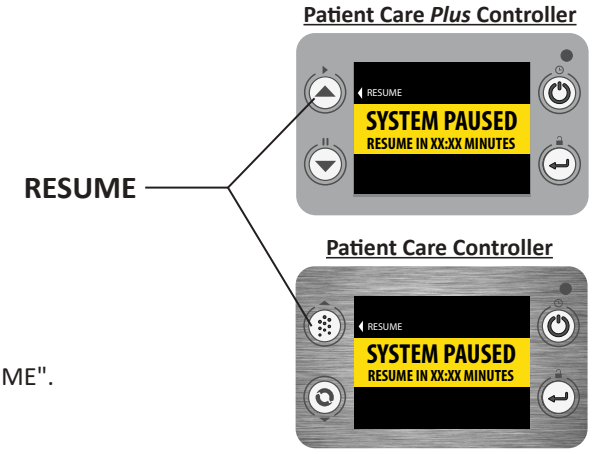
"OPTIONS" Menu

SELECTION: 30 Minute "PAUSE" Mode

Once "PAUSE" is selected, surface will immediately deflate.

- To immediately "RESUME" therapy, touch the either the "UP ARROW" or "MICROCLIMATE" key, depending on your model.

NOTES:
- Default "PAUSE" time = 30 minutes.
- Once "PAUSE" time reaches 00:00, therapy will automatically "RESUME".
- If surface expires while in "PAUSE" mode, please follow the screen instructions and replace the surface.

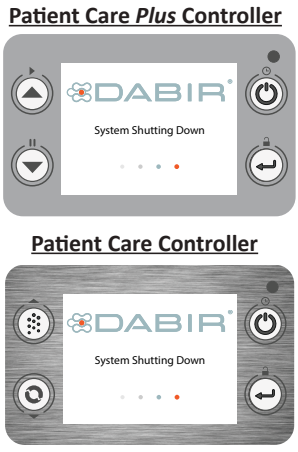


"PAUSE" Mode

SELECTION: "SHUTDOWN" Mode

- To "SHUTDOWN" controller, touch and hold "POWER" key 2 seconds.

NOTE:
- The controller will temporarily display the following screen until the system shutdown process is complete. (Therapy is no longer applied.)



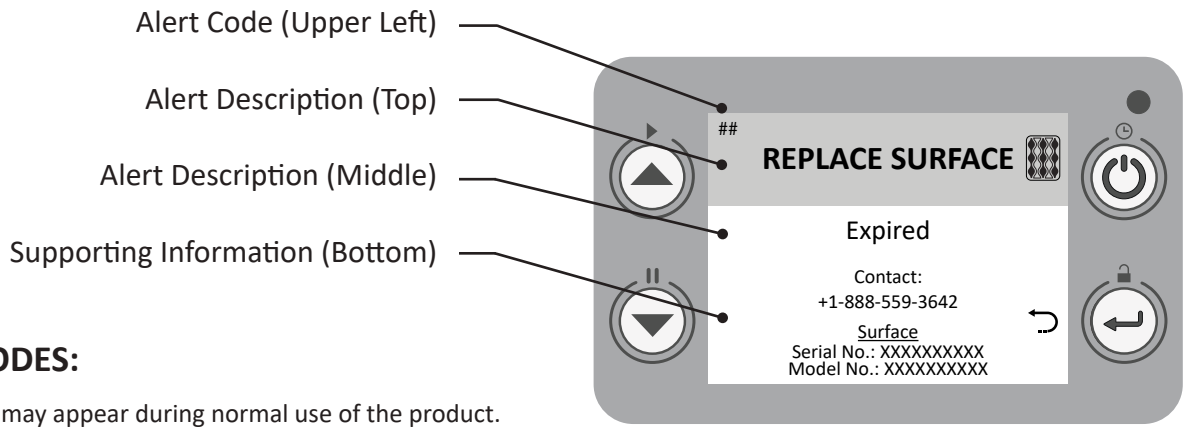
⚠ IMPORTANT OPERATION NOTES:

CAUTIONS:

- Powering "OFF" or "PAUSING" the controller after the preprogrammed surface life has expired will automatically force surface replacement.
- Power "OFF" or "PAUSE" the controller for cardiac arrest events. (NOT intended for use during CPR.)
- Always turn the controller "OFF" during patient transfer, cleaning and before patient positioning.

6.0 Alerts

The controller uses various alert screens to communicate when action is required:



ALERT MODES:

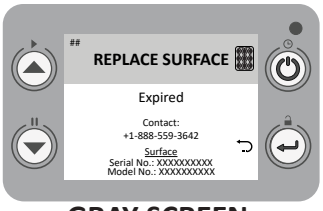
Various alerts may appear during normal use of the product. Please follow the instructions as specified on the display or contact Dabir Customer Support:

Technical and Warranty Support
support@dabir-surfaces.com
Tel: +1(888)559-3642

VISUAL ALERTS: Displays which may be encountered during operation:

ACTION REQUIRED: (GRAY SCREEN *with instructions*)

- SURFACE LOW (Programmed Life)
- REPLACE SURFACE (Programmed Life or Shelf Life Expired)
- OCCLUSION (One Hose Blocked)
- Battery-Compatible Models: Low Battery Charge
- Battery-Compatible Models: Replace Battery (Incompatible)



GRAY SCREEN

SYSTEM WARNINGS: (YELLOW SCREEN *with instructions*)

- REPLACE SURFACE (Improper Identification or Expired)
- CHECK CONNECTION
- OVERHEATED (Please wait)
- LOW TEMPERATURE (Please wait)
- SERVICE UNIT (Various Performance Alerts)
- LOW PRESSURE
- SYSTEM PAUSED (No Therapy)
- OCCLUSION (Both Hoses Blocked)

YELLOW SCREEN

AUDIBLE ALERTS: Sounds which may be encountered during operation: (Examples)

ALERT (with GRAY SCREEN): Buzzer on for half second, repeats three times.

- SURFACE LOW (Programmed Life) - Surface is running low on hours with remaining hours shown on screen.
- REPLACE SURFACE (Programmed Life or Shelf Life Expired)

WARNING (with YELLOW SCREEN): Buzzer on for two seconds, repeats every five seconds.

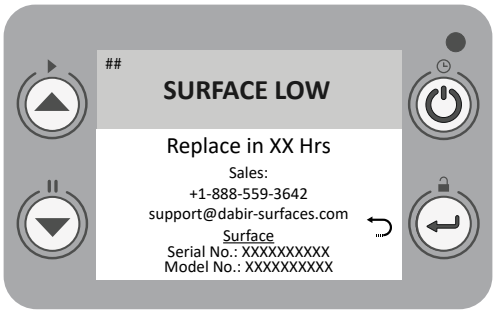
- CHECK CONNECTION
- SERVICE UNIT (Various Performance Alerts)

6.0 Alerts - Continued

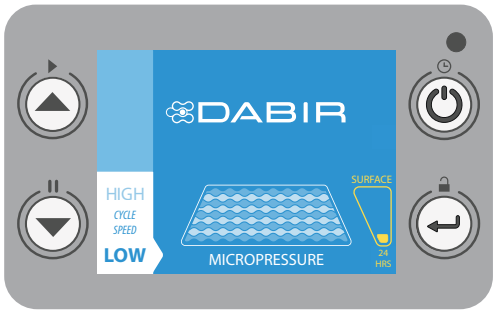
ALERT EXAMPLE: SURFACE LOW

Remaining surface life screen alerts ("SURFACE LOW") will start appearing at 24-, 12-, 4-, 3-, 2-, and 1-hour intervals before surface expiration and forced replacement occurs. Audible alerts will accompany each gray alert screen notification.

NOTE: Interim alert screens can be cleared by touching the "SELECT" key. During the remaining 24 hours of surface life, the surface life gauge will be yellow.



Surface Low Alert Screen



Main Screen after Alert is Cleared

ALERT EXAMPLE: SURFACE EXPIRATION

When the remaining surface life is depleted, the "REPLACE SURFACE" yellow warning screen will appear.

NOTE: When surface expires, therapy will be allowed to continue until the next "SHUTDOWN" or "PAUSE" occurs.

Surface Expired Warning Screen

ALERT EXAMPLE: OCCLUSION

When one of the hoses is occluded preventing air-flow into the surface, the "OCCLUSION" gray alert screen will appear. The system will switch to the other zone and continue to deliver therapy.

If the hose occlusion is not corrected upon switching back OR both hoses are occluded, the "OCCLUSION" yellow warning screen will appear. The occlusion will need to be corrected for therapy to resume.

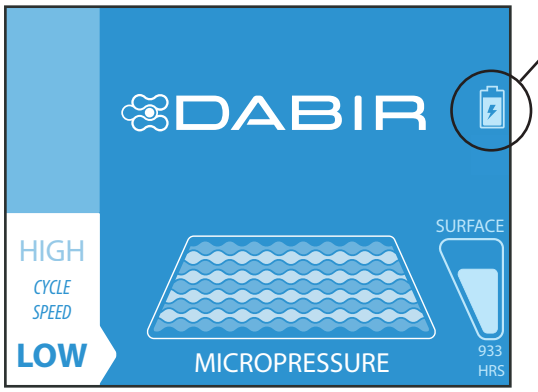
Occlusion Alert:
Therapy Temporarily Continues

Occlusion Warning:
Therapy Stops

6.1 English Installation Guide: C2-9009 (Lithium-Ion Battery)

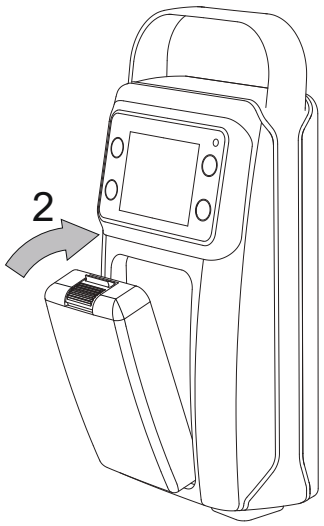
Battery Insertion & Charging Instructions: (Battery Compatible Controller Only)

1. Remove Battery from packaging. **(NOTE: INITIAL CHARGING WILL TAKE UP TO 2 HOURS.)**
2. Insert bottom of Battery into the controller pocket, then pivot inwards until an audible "CLICK" occurs. It is important to note that the Battery can be installed while the controller is either ON or OFF. The controller does not need to be ON to charge the Battery, but it must be plugged in.
3. When properly connected, the Battery icon will appear. If the icon is not present, Battery is NOT properly connected and Step 2 MUST be repeated.



Step 3: Battery Icon Check

- Connected & Charging
- Charge Level
- = Low Charge (Yellow)
- = Battery Defective

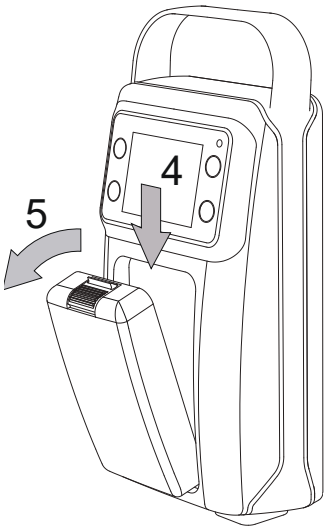


NOTE: The Battery will automatically charge when AC power is supplied to controller.

Battery Removal:

NOTE: After Battery removal, controller MUST be connected to AC power source to maintain therapy.

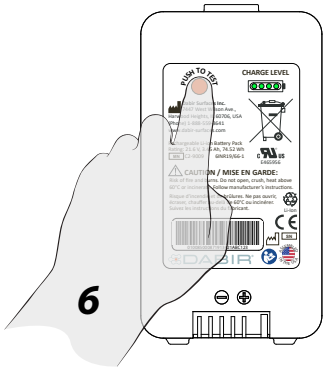
4. To remove Battery from controller, grip the Battery by its sides and depress the Orange button.
5. Rotate Battery outward and remove as shown.



Checking Battery Charge Level:

6. Press "PUSH TO TEST", to activate Charge Level LED indicator.

NOTE: It is the responsibility of the user to properly clean and disinfect the system prior to patient use.



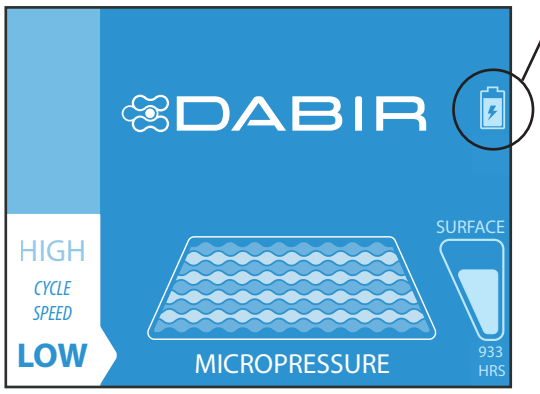
Warnings:

- Do not dismantle, open or shred Battery.
- Do not expose Battery to heat or fire. Avoid storage in direct sunlight.
- Do not short-circuit Battery, including during cleaning. Do not store Battery haphazardly in a box or drawer where they may short-circuit with other Batteries or conductive objects.
- Do not remove Battery from its original packaging until required for use.
- Do not subject Battery to mechanical shock.
- ONLY charge the Battery using a Dabir controller.
- It is recommended that the Battery be removed and stored separate from the controller when not in use.
- Properly dispose of Battery according to local regulations.
- Keep Battery clean and dry.
- Battery MUST be fully charged before use. (See Above)
- Retain original product literature for future reference.
- ONLY use Dabir certified Batteries.
- Battery charging time will vary depending on its overall condition and age.

6.2 French Installation Guide: C2-9009 (Lithium-Ion Battery)

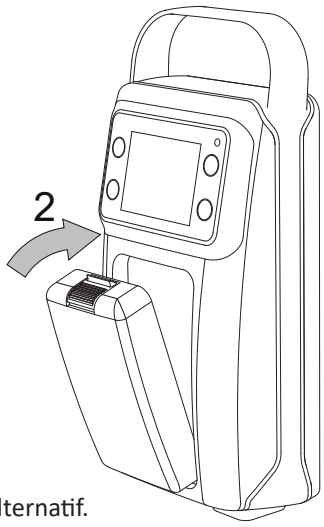
Instructions pour l'insertion et la recharge de la batterie : (contrôleur compatible avec la batterie uniquement)

1. Retirez la batterie de l'emballage. (REMARQUE : LA CHARGE INITIALE PRENDRA JUSQU'À 2 HEURES.)
2. Insérez la partie inférieure de la batterie dans la station de recharge, puis faites pivoter le haut de la batterie vers l'intérieur jusqu'à ce qu'un « CLIC » se fasse entendre. Il est important de noter que la batterie peut être installée lorsque le contrôleur est en position ON (Marche) ou OFF (Arrêt). Le contrôleur n'a pas besoin d'être en position ON (Marche) pour recharger la batterie, mais il doit être branché.
3. L'icône de la batterie apparaît lorsque la connexion de recharge est correctement établie. Si l'icône n'apparaît pas, la batterie n'est PAS correctement connectée et l'étape 2 DOIT être répétée.



Étape 3 : Vérification de l'icône de la batterie

- Connecté et en cours de recharge
- Niveau de charge
- = Low Charge (Yellow)
- = Battery Defective

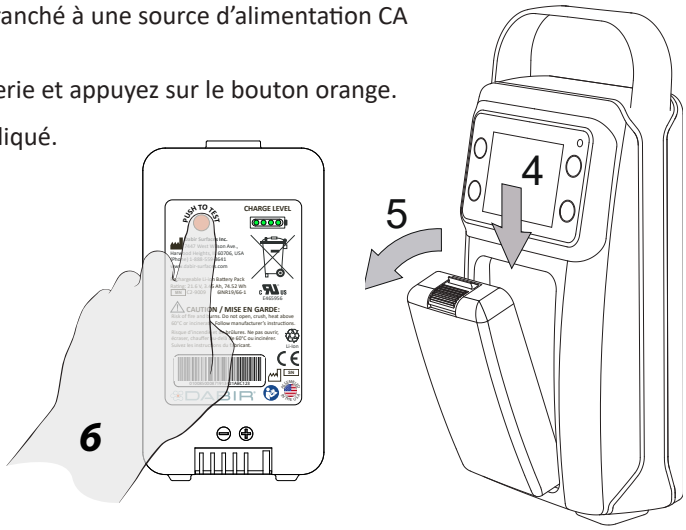


REMARQUE : La batterie se recharge automatiquement lorsque le contrôleur est alimenté en courant alternatif.

Retrait de la batterie :

REMARQUE : Après le retrait de la batterie, le contrôleur DOIT être branché à une source d'alimentation CA pour continuer la thérapie.

4. Pour retirer la batterie du contrôleur, saisissez les côtés de la batterie et appuyez sur le bouton orange.
5. Faites pivoter la batterie vers l'extérieur, puis retirez-la comme indiqué.



Vérification du niveau de charge de la batterie :

6. Activez les témoins lumineux de niveau de charge en appuyant sur le bouton « PUSH TO TEST ».

REMARQUE :
L'utilisateur est responsable de nettoyer et de désinfecter correctement le système avant son utilisation par le patient.

Avertissements:

- Ne pas démonter, ouvrir ou déchiqueter la batterie.
- Ne pas exposer la batterie à la chaleur ou au feu. Éviter le stockage directement sous la lumière solaire.
- Ne pas court-circuiter la batterie. Ne pas stocker la batterie de manière désordonnée dans une boîte ou un tiroir, où ils peuvent se mettre en court-circuit entre eux ou être mis en court-circuit par d'autres objets métalliques.
- Ne pas retirer la batterie de son emballage d'origine tant que cela n'est pas nécessaire à son utilisation.
- Ne pas faire subir de chocs mécaniques au batterie.
- N'utilisez aucun autre chargeur que le contrôleur.
- Ne pas utiliser de batterie qui ne sont pas conçu(e)s pour être utilisé(e)s avec l'appareil.
- Maintenir la batterie propres et secs.
- Il est nécessaire de charger la batterie avant usage. Référer aux instructions des fabricants ou au manuel de l'appareil concernant les instructions de charge correcte.
- Conserver les documentations d'origine relatives au produit pour s'y référer ultérieurement.
- N'utiliser la batterie que dans l'application pour laquelle il ou elle est prévue.
- Mettre la batterie au rebut de manière convenable.

7.0 Cleaning / Disinfecting

The cleaning procedures listed below are recommended by Dabir and should be adjusted according to specific healthcare facility policy. Aggressive cleaning measures may cause damage.

NOTE: It is the responsibility of the user to replace surfaces when needed.

IMPORTANT CLEANING RELATED NOTES:

CAUTIONS:

- Always remove patient from surface prior to cleaning.
- Maintain accessibility to Power Cord such that it can be easily unplugged prior to cleaning and/or servicing.
- Always turn controller "OFF" during patient transfer, cleaning and before patient positioning.
- Do NOT allow liquids or loose particle debris to enter or block any part of the controller.
- Keep surface vents and connectors free of liquids or loose particle debris which may restrict air flow.
- If fluid is ever visible inside of the surface, hose or in-line filter (model dependent), the surface must be replaced.
- Sharp objects from any source may damage the surface and compromise function. If damaged, replace immediately.
- After cleaning / disinfecting, allow surface adequate time to fully dry before storing and patient use.
- It is the responsibility of the user to properly dispose of the surface when damaged or soiled.
- Do NOT use if product is damaged.
- Do NOT autoclave.

Cleaning the Controller

Power “OFF" the controller and disconnect the Power Cord from the wall outlet prior to cleaning. Remove visible soiling, then disinfect by wiping down all areas with a Dabir approved hospital grade disinfectant cleaner. Always allow proper contact drying time per the disinfectant manufacturer's instructions.

NOTE: Do NOT saturate cloth or apply fluids / liquids directly to the controller to prevent fluid ingress of this sensitive electronic medical device. Inspect controller air intake and exhaust vents to ensure they are NOT obstructed by loose particle debris.

Cleaning the Surface

With the surface connected, remove visible soiling, then disinfect by wiping down all areas with a Dabir approved hospital grade disinfectant cleaner. Always allow proper drying time per the disinfectant manufacturers instructions. To remove excessive cleaning residue, wipe surface with a water-moistened cloth and re-disinfect.

Dabir Approved & Unapproved Cleaners

Please visit: www.dabir-surfaces.com/cleaners.

NOTE: Test results have shown that "unapproved cleaners" will reduce Dabir product life with repeated use.

Surface Disposal

Please follow Section 7 Cleaning Procedures prior to disposal or recycling per hospital standard procedure.

Battery Disposal

Properly dispose of Battery according to local waste management regulations.

THE FOLLOWING SECTIONS ARE INTENDED FOR STAFF USE ONLY. PLEASE REFER TO SECTIONS 11, 12 & 13 FOR SPECIFICATIONS, WARRANTY & CONTACT INFORMATION.

8.0 Preventative Maintenance & Service

Routinely check controller and Power Cord for signs of wear or damage and replace if necessary using Dabir certified parts. For any non-serviceable damage, please contact the manufacturer (Do NOT dispose).

Serial Number Labels

All serial numbers are in the following format: LSYYDDDXXXXT Please provide component serial numbers when requesting service.

NOTE: Serial number can be found by locating the **SN** symbol on the appropriate component label.

Preventative Maintenance Checklist:

At minimum, check all items listed below during annual preventative maintenance. You may need to perform checks more frequently based on your specific level of use. Always remove product from service, clean and disinfect (while unplugged) before performing preventative maintenance or service.

PREVENTATIVE MAINTENANCE CHECKLIST:

Product Serial Number: _____

Completed By: _____ Inspection Date: _____

Visual Inspection Checklist (POWER DISCONNECTED)

REQUIRED: CONTROLLER *(Surfaces are semi-disposable and not considered serviceable.)*

Inspect the following components and assemblies for signs of visible damage or wear. Replace if applicable or contact manufacturer for service. (See system Mechanical Diagram for components listed below)

- □ Front, Rear, and Middle Housings (cracks, loose or missing parts, structural damage, gasket integrity)
- □ User Interface Display (cracks, legibility)
- □ Rubber Mounting Feet (four(4): located underside of controller, loose or missing parts)
- □ Surface connector Port (cracks, loose parts, obstructions)
- □ Power Cord (loose or missing terminals, cracking, exposed wires, poor retention, debris)
- □ Labels (peeling, legibility, torn or missing)
- □ Air Inlet (Bottom of middle housing / filter cover: remove any debris / replace)
- □ Air Exhaust (Rear housing: remove any debris)
- □ Mounting accessories (damage, integrity)

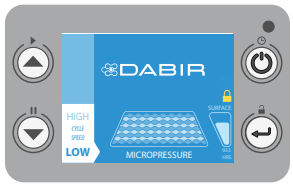
NOTES: _____

_____

System Performance Check (POWER CONNECTED)

REQUIRED: Controller, Power Cord, Surface (Any model) & Stop Watch (Not Supplied)

Set-up Instructions: Follow the procedure defined in Section 3. (Surface does **NOT** require bed installation.) Perform the following system checks to confirm basic function:



TEST 1: CONFIRM SYSTEM "POWER ON" FUNCTION:

1. Place the controller on a safe, stable work location and connect the surface.
2. Confirm that the unit is plugged in, but initially powered "OFF".
3. Power the controller "ON" per the instructions in Section 4. The system "START-UP" screen should appear and then transition to the main "Blue" therapy screen within 1 minute.
4. Once the "Blue" therapy screen appears, the surface should begin to inflate it's first zone at the default setting.
5. Monitor function for 2 full alternating cycles and record any alert codes that appear.
6. Follow alert instructions to confirm that they will clear. If not, the performance check is considered a "FAIL".
7. No remaining uncleared alerts is considered a "PASS". Power unit "OFF" per Section 5.

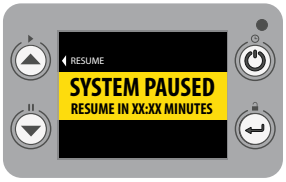
□ Document results (including alert description & code numbers where applicable): **(PASS / FAIL)**

NOTES: _____

_____

_____

TEST 2: CONFIRM SYSTEM "PAUSE" FUNCTION:



1. Repeat TEST 1: Steps 1-4 above. Once the "Blue" therapy screen appears, the surface should begin to inflate its first zone at the default setting. (Confirm with a quick hand check.)
2. Navigate to the "OPTIONS" screen by touching the upper right "POWER" key. **(Note that there is a slightly longer "hold delay" required on this key touch to prevent accidental shutdowns.)**
3. Select the "PAUSE" function by touching the lower left "DOWN ARROW" (or "MICROPRESSURE") key per Section 5.
4. A yellow "PAUSE" screen (as shown to the right) should appear with a 30 minute "automatic restart" countdown initiated. If this "PAUSE" screen does not display after three (3) attempts, the test is considered a "FAIL".
5. **NORMAL OPERATION:** The system should remain paused for the duration of the countdown with automatic therapy resuming at the end. (Time = 00:00) If not, the performance check is considered a "FAIL".
6. **MANUAL OVERRIDE TEST:** Repeat TEST 2: Steps 1-4 above to pause the system again (Yellow "PAUSE" screen should appear.)
7. Manually "RESUME" therapy by touching the upper left "UP ARROW" (or "MICROCLIMATE") key as prompted by the display. Therapy should resume accordingly.
8. Record any alert codes that may appear during either test. Follow the display alert instructions to confirm that they will clear. If not, the performance check is considered a "FAIL".
9. No remaining uncleared alerts is considered a "PASS". Power unit "OFF" per Section 5.

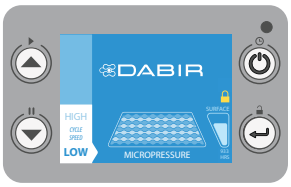
□ Document results (including alert description & code numbers where applicable): **(PASS / FAIL)**

NOTES: _____

_____

_____

8.1 Service - System Performance Check - Continued



TEST 3: CONFIRM OPTIONAL SETTINGS CHANGES

1. Repeat TEST 1: Steps 1-4 above. Once the "Blue" therapy screen appears, the surface should begin to inflate its first zone at the default setting. (Confirm with a quick hand check.)
2. **MICROPRESSURE SETTING:** Change the cycle speed setting by touching the "DOWN ARROW" (or "MICROPRESSURE") key once. The "CYCLE SPEED" status bar (lower left) should switch to "HIGH", accompanied by a single audible tone. Upon its next transition cycle, the surface should begin to alternate inflation zones approximately every 2.5 minutes. **(Record any anomalies.)**
3. **MICROCLIMATE INPUT KEY:** *(NOTE: Microclimate function is currently unavailable. The key is still used for other menu related inputs.)* Test by touching the "UP ARROW" (or "MICROPRESSURE") key once. The information screen should display the following message: "MICROCLIMATE FEATURE NOT AVAILABLE", then automatically revert back to the "Blue" therapy screen with no interruption in normal system function. **(Record any anomalies.)**
4. **MENU SELECT / LOCKOUT KEY:** *(Staff Use ONLY.)* Test the "KEY LOCK" function by touching the "SELECT" key for ≥ 4 seconds. The information screen should display a "KEYS LOCKED" notice, then automatically return to the "Blue" therapy screen with a yellow lock icon visible on the middle right of the display. To unlock, repeat Step 4. **(Record any anomalies.)**
5. No remaining uncleared alerts is considered a "PASS". Power unit "OFF" per Section 5.

□ Document results (including alert description & code number where applicable): **(PASS / FAIL)**

NOTES: _____

_____

_____

8.2a Service - Filter Replacement & Leakage Current Check

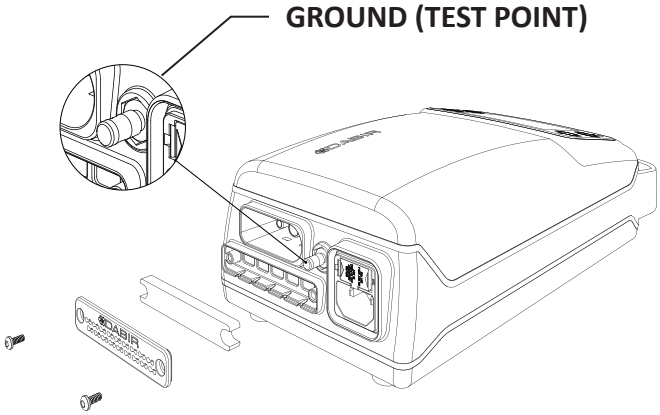
Filter Service Kit (POWER DISCONNECTED)

Recommended Replacement: Annually - See Filter Service Kit (C2-9002) [#]

SERVICE INSTRUCTIONS: (Reference Item #s to the system Mechanical Diagram - Page 22)

1. Remove Filter Cover Mounting Screws (2) and dispose. (Item 8)
2. Remove Filter Cover (Item 9) and Air Filter (Item 10) and dispose.
3. Remove any debris from the air inlet pocket.
4. Insert new Air Filter from separately purchased kit.
5. Replace Filter Cover and secure with new Screws.

NOTE: Do not overtighten Screws.



Leakage Current Test - Optional

Use the earth ground test point (see above) to perform standard leakage current tests. Please reference your specific test equipment "Instructions-for-use" manual for guidance. (Not supplied here.)

Fuse Drawer Service Kit (POWER DISCONNECTED)

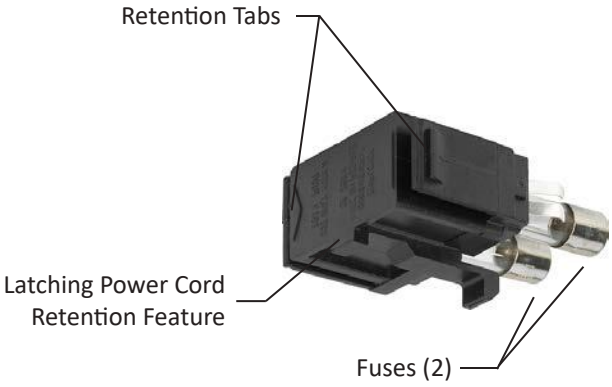
Fuse Drawer Service Kit (C2-9004) #

NOTE: In the event that the latching power cord retention feature becomes damaged, the fuse drawer should be replaced for proper function.

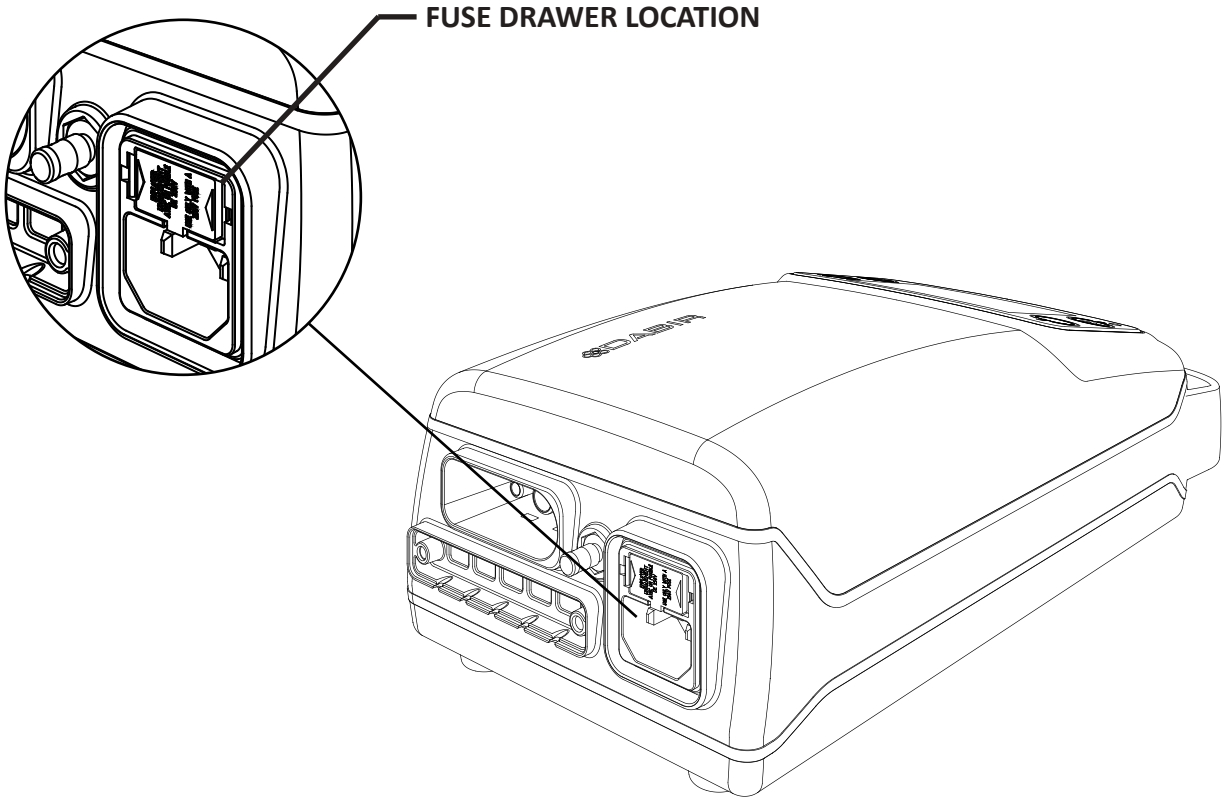
SERVICE INSTRUCTIONS:

1. Disconnect AC power from wall outlet.
2. Disconnect the power cord from controller (See Section 3.4).
3. Locate the fuse drawer as indicated in the image below.
4. Compress the two retention tabs and remove fuse drawer.
5. Discard the old fuse drawer, including fuses.
6. Inspect the receiving pocket for damage.
   (If damaged, contact manufacturer)
7. Remove the replacement fuse drawer service kit from packaging.
8. Insert the replacement fuse drawer in the same orientation as when removed (listen for audible "CLICKS" to confirm insertion).

   NOTE: Do NOT force insertion. The fuse drawer will insert easily when oriented properly.
9. Reattach the power cord per Section 3.0.
10. Service is now complete. Confirm operation by following the steps identified in Section 8.1, Test 1.



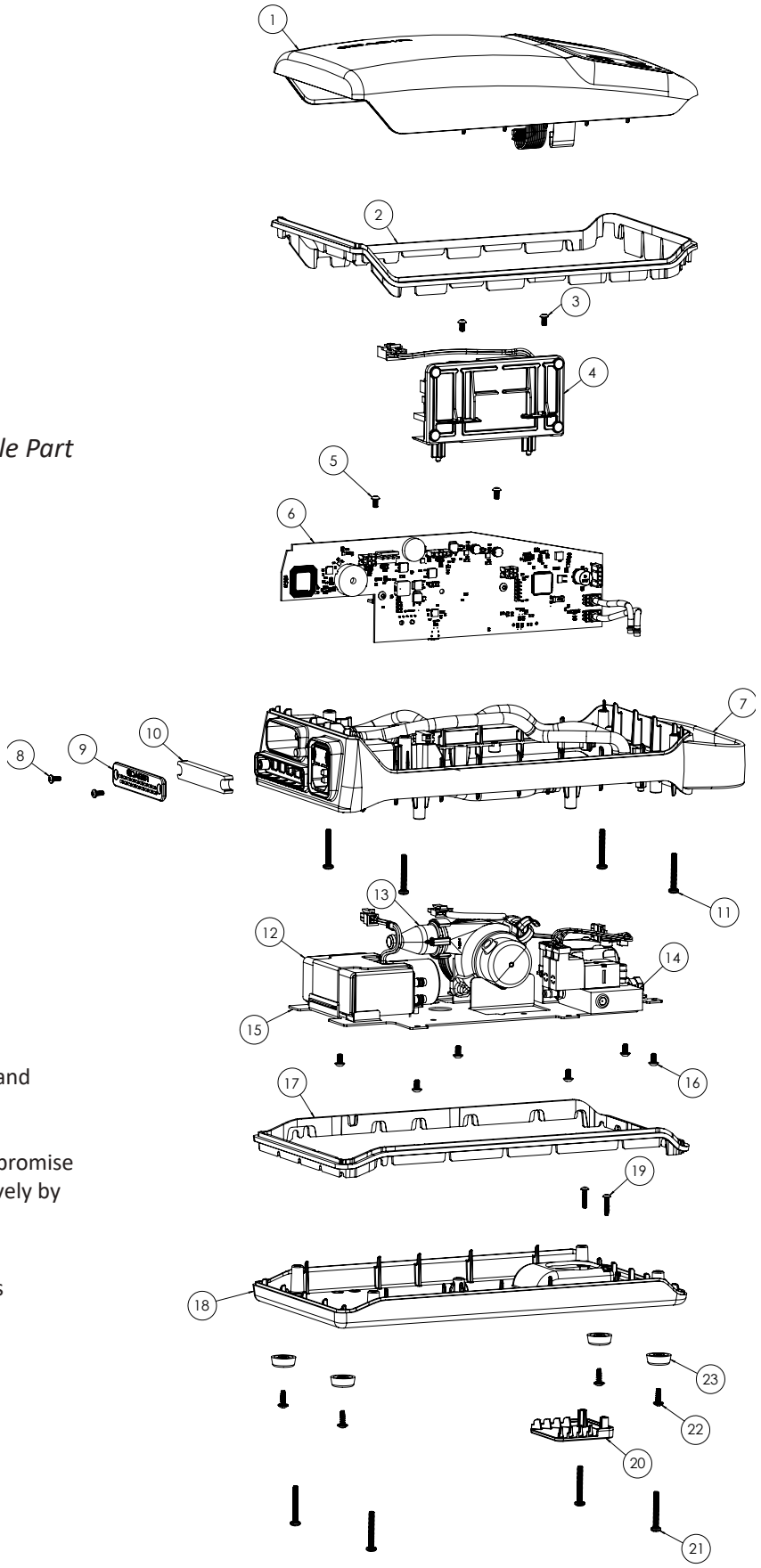
Fuse Drawer Kit



System Mechanical Diagram (Controller)

Primary Components List:

1. Front Housing Assembly (1)**
2. Front Gasket (1)
3. Power Supply Mounting Screw (2)
4. Power Supply Assembly (1)
5. Mother Board Mounting Screw (2)
6. Mother Board Assembly (1)
7. Middle Housing Assembly (1)
8. Filter Cover Mounting Screw (2) - *Serviceable Part*
9. Filter Cover (1) - *Serviceable Part*
10. Air Filter (1) - *Serviceable Part*
11. Front Housing Attachment Screw (4)
12. Pump Assembly (1)
13. Blower Assembly (1)*
14. Solenoid Assembly (1)
15. Metal Chassis (1)
16. Metal Chassis Mounting Screw (6)
17. Rear Gasket (1)
18. Rear Housing Assembly (1)
19. Fan Cover Mounting Screw (2)
20. Fan Cover (1)
21. Rear Housing Mounting Screw (4)
22. Rubber Isolator Screw (4)
23. Rubber Isolator (1)



NOTES / COMMENTS:

Accessory component detail not shown. Some C2-10V1 and C2-10VB components not shown.

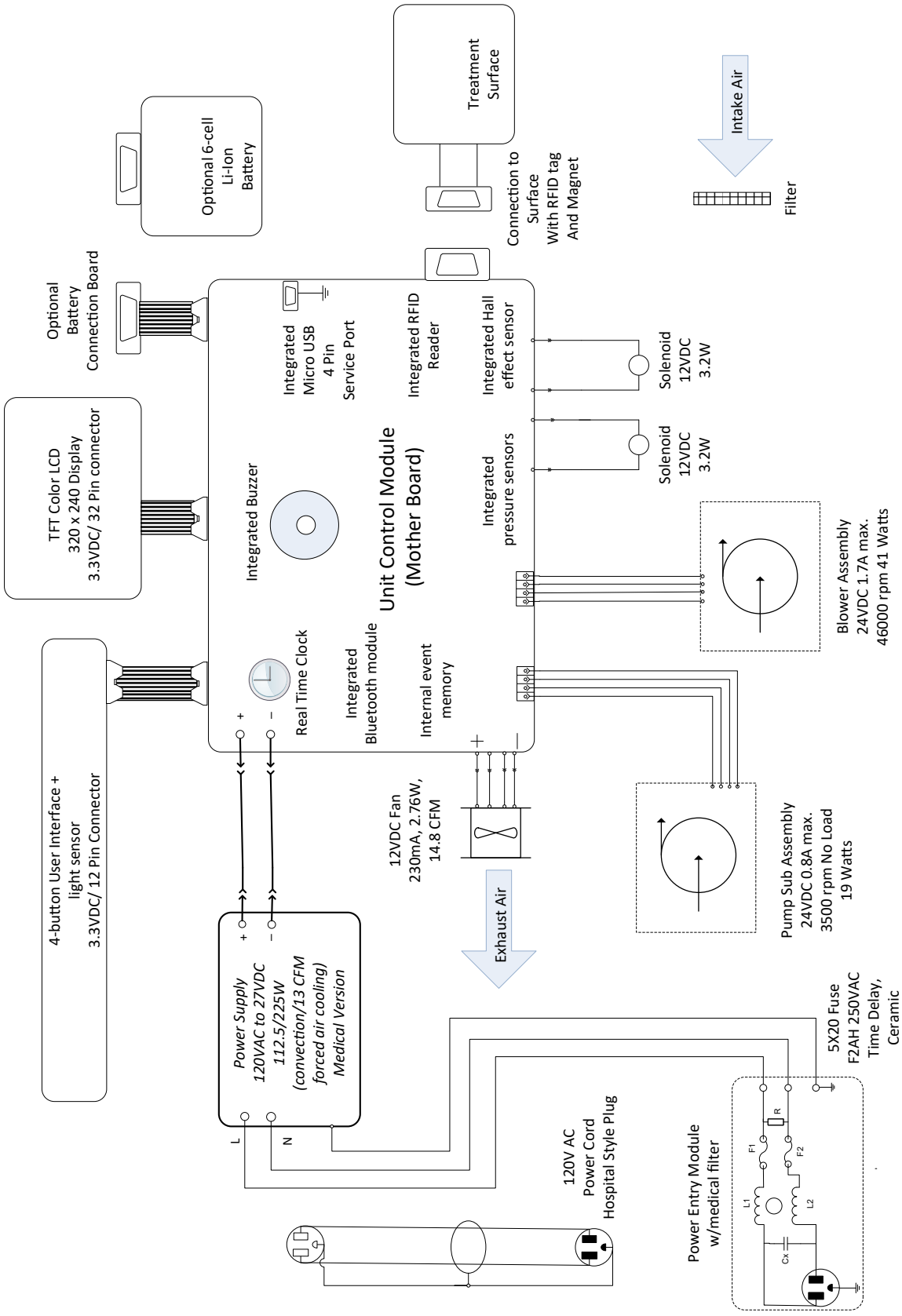
Modification of this device voids warranty and may compromise intended function. Service should be performed exclusively by the manufacturer unless otherwise noted.

* Not present in C2-1002, C2-10V1, and C2-10VB Models
** For C2-10VB Models: Item 1 appears different, not all components shown.

Technical and Warranty Support

support@dabir-surfaces.com
Tel: +1 (888) 559-3642

System Electrical Schematic (Controller)



8.5 Service - Quick Reference: Replacement Parts

Quick Reference: Replacement Parts (Controller & Accessories)

Please reference Section 8.2 for service part replacement instructions.

Model #	Description
C2-10V1	Patient Care ***Plus*** Controller (Facility Use)
C2-10VB	Patient Care ***Plus*** Battery Controller (Facility Use)
C2-90B2-15	15' Power Cord (Latching, non-COO compliant)
C2-9001	Mount - IV Pole Kit
C2-9002	Filter Kit
C2-9004	Fuse Drawer Kit
C2-9009	Battery (Lithium-Ion)
C2-9010	Mount - Bed Rail (Universal Strap)*

*Product labeling is engraved and may be less legible when assembled.

Replacement parts are available for purchase at:

Dabir Surfaces, Inc., 7447 West Wilson Ave., Harwood Heights, IL 60706 USA [Tel: +1(888)559-3641]

9.0 Troubleshooting

Repairs and Technical Support

See Section 6 for specific alert codes.
For non-alert codes and troubleshooting, see table below:

Problem	Potential Cause	Remedy
Controller does NOT power “ON”	No electric supply (Excluding a power outage.)	Confirm Power Cord is plugged into the Controller and appropriate wall outlet or Battery is charged.
	Blown fuse	Contact manufacturer
	Internal malfunction	Contact manufacturer
Controller powers “ON” and displays "REPLACE SURFACE"	Surface life expired, connection issue or other malfunction.	Replace surface (See Section 3.2)
Abnormal noises and/or vibration coming from the Controller.	Internal malfunction	Power “OFF” the Controller. Contact manufacturer.
Air leakage sounds	Hose connection issue or other leakage source	Reconnect surface (See Section 3.3)
Abnormal odors coming from the Controller.	Internal malfunction	Power “OFF” the Controller. Contact manufacturer

- **If controller fuse is blown, please contact Dabir technical support for service. (DO NOT REPLACE)**
- **If power source is interrupted, system will automatically restart upon power restoration. (Manual startup may be required otherwise: See Section 4)**

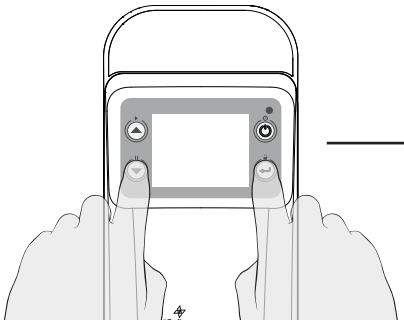
How to reach us:
Dabir Surfaces maintains regular business hours from 9:00 a.m. to 5:00 p.m. Central Standard Time.

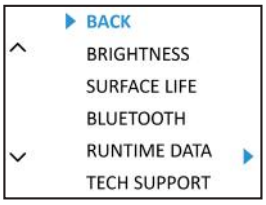
Technical and Warranty Support
support@dabir-surfaces.com
Tel: +1 (888) 559-3642

Distributor (North America) - Healthcare Customers
STERIS Corporation
Customer Service
Tel: +1(800)548-4873
Fax: +1(440)639-4450
Service Support
Tel: +1(800)333-8828

10.0 Advanced Settings

Accessing "MENU" mode enables advanced settings options and performance display information by simultaneously holding both the "MICROPRESSURE" (or "DOWN ARROW") and "SELECT" keys for 3 seconds.

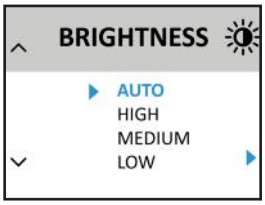
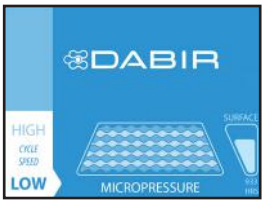
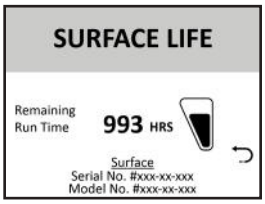
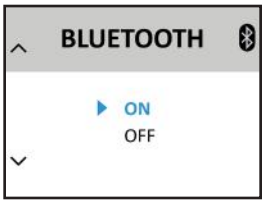
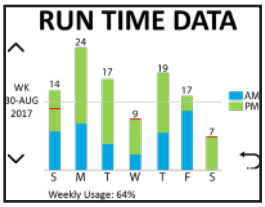




"MENU" Display

NOTES:

- Therapy will continue while in "MENU" mode.
- Use the "UP ARROW" and "DOWN ARROW" keys to vertically scroll through the various menu options.
- Use the "SELECT" key to navigate into new sub-menus.

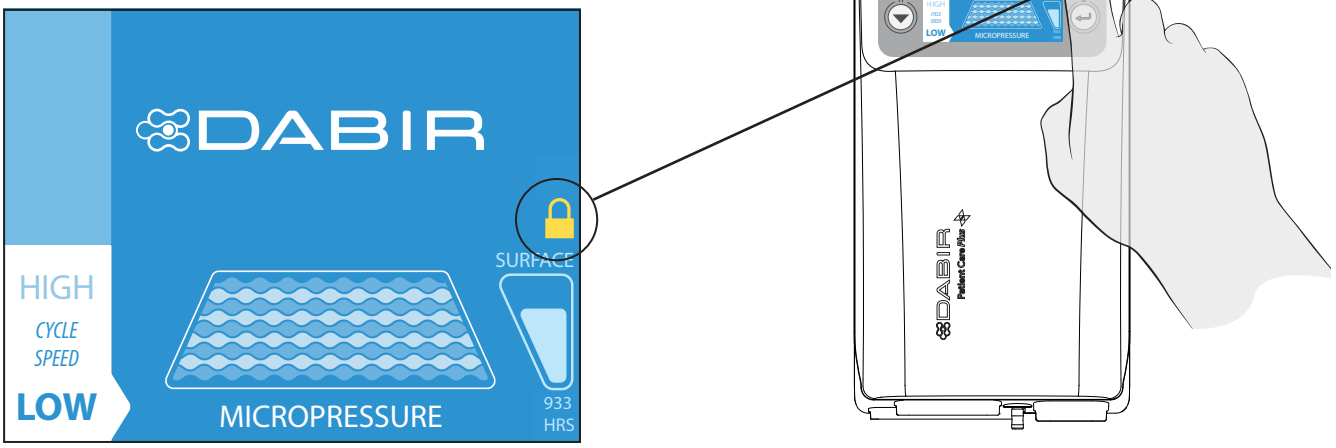
Display	Menu Selection
	**Brightness** When "AUTO" is selected, ambient light will automatically determine "DAY/NIGHT" mode. Manually selecting either "HIGH", "MEDIUM" or "LOW" will change brightness accordingly.  "DAY" Mode  "NIGHT" Mode
	**Surface Life** Details remaining usable surface Life before expiration. **NOTE: Therapy will not stop until the next power "OFF" or "PAUSE" command occurs.**
	**Bluetooth** This feature is used by manufacturer ONLY for advanced diagnostics purposes.
	**Runtime Data** Provides customer usage details and performance feedback. **NOTE: User may be prompted to confirm the approximate local time before "RUNTIME DATA" menu screen appears. Time (HH:MM AM/PM) should be adjusted relative to your local time zone for accuracy. (MM is adjusted in increments of 30 minute intervals.)**
	**Tech Support** Contains manufacturer's contact information, device serial number, model number, and software version of controller.

10.1 Advanced Settings ("KEY LOCK" Mode)

"KEY LOCK" mode is an optional feature that prevents accidental key activation.

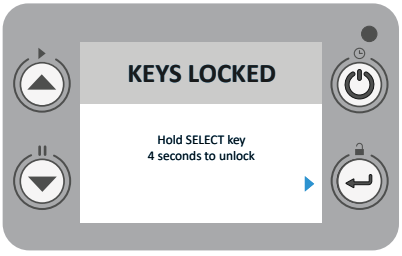
"KEY LOCK" mode "ON":

1. Touch and hold the "SELECT" key  for at least 4 seconds.
2. The "KEY LOCK" mode icon will display when active. (Yellow Lock Symbol)



NOTES:

- "KEY LOCK" mode does NOT change settings or therapy.
- When any other key is touched while in "KEY LOCK" mode, the "KEYS LOCKED" screen will appear instructing user how to exit. This message will automatically disappear within 6 seconds or upon the next key touch.



"KEY LOCK" mode "OFF":

1. Touch any key to access the "KEYS LOCKED" screen.
2. Touch and hold the "SELECT" key for at least 4 seconds to exit.
3. The yellow lock symbol should disappear granting full access to the controls.

11.0 Specifications

Controller Specifications	
Model:	C2-1001, C2-1002, C2-10V1, C2-10VB
Supply Voltage:	100-240 VAC
Supply Frequency:	50-60 Hz
Current:	1.7/0.85 A
Size:	337 x 140 x 95 mm (13.25 x 5.50 x 3.75 in.)
Weight:	2.05 kg (4.5 lb)
Case Material:	Plastic
Fuse Ratings:	2A, 5 x 20mm, Time Delay, 1A @ 240V
Type of protection against electric shock:	Class II
Degree of protection from electrical shock:	Type BF
Degree of protection from liquid ingress:	IP33
Mode of Operation:	Continuous
	RF Transmitter
	Separate collection for electronic waste
Environment Conditions:	

	Operation: (Controller) Operation: (Surface)	10°C to 35°C (50°F to 95°F) 30-80% RH 10°C to 45°C (50°F to 104°F) 30-80% RH
	Storage and Transport:	-40°C to 60°C (-40°F to 140°F) 10%-95% RH (non-condensing)
	Operating Pressure:	70 kPa to 106 kPa

Data subject to change.

Power Cord Specifications		
	Model:	C2-90B2-15
	Weight:	0.40 kg (0.85 lb.)
	Length:	4.5 m (15 ft.)
	Wall Plug:	NEMA 5-15P 3P Hospital Grade Green Dot
	Controller Plug:	IEC 60320-C13

11.0 Specifications - Continued

NOTE: C2-10XX refers to any or all of the following models: C2-1001, C2-1002, C2-10V1, C2-10VB.

Models C2-10XX Manufacturer's Declaration- Electromagnetic Immunity

Model C2-10XX systems are intended for use in the electromagnetic environment specified below. The customer or the user of the **Model C2-10XX** system should assure that it is used in such an environment.

Immunity Test	IEC 60601-1, 3.1 Edition Test Level	Compliance Level	Electromagnetic Environment/Guidance
Electrostatic discharge (ESD) IEC 61000-4-2: 2008	± 8 kV contact ± 15 kV air	± 8 kV contact ± 15 kV air	Floors should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4: 2012	± 2 kV for power supply lines ± 1 kV for input/output lines	± 2 kV for power supply lines ± 1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5: 2005	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11: 2004	0% UT (>100% dip in UT) for 0.5 cycle 0% UT (100% dip in UT) for 1 cycle 70% UT (30% dip in UT) for 30 cycles 0% UT (100% dip in UT) for 300 cycles	0% UT (>100% dip in UT) for 0.5 cycle 0% UT (100% dip in UT) for 1 cycle 70% UT (30% dip in UT) for 30 cycles 0% UT (100% dip in UT) for 300 cycles	Mains power quality should be that of a typical commercial or hospital environment. If the user of the **Model C2-10XX** requires continued operation during power mains interruptions, it is recommended that the **Model C2-10XX** be powered from an uninterruptible power supply or a battery.

NOTE: UT is the AC mains voltage prior to application of the test level.

11.0 Specifications - Continued

NOTE: C2-10XX refers to any or all of the following models: C2-1001, C2-1002, C2-10V1, C2-10VB.

Models C2-10XX Manufacturer's Declaration- Electromagnetic Immunity

Model C2-10XX systems are intended for use in the electromagnetic environment specified below. The customer or the user of the **Model C2-10XX** system should assure that it is used in such an environment.

Immunity Test	IEC 60601-1, 3.1 Edition Test Level	Compliance Level	Electromagnetic Environment/Guidance
Conducted RF IEC 61000-4-6: 2013	3 Vrms 6Vrms (Amateur radio) 150 kHz to 80 MHz	3 Vrms 6Vrms (Amateur radio) 150 kHz to 80 MHz	Portable and mobile RF communications equipment should be used no closer to any part of the **Model C2-10XX**, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. **Recommended separation distance** d=1.2√P d=1.2√P 80 MHz to 800 MHz d=2.3√P 800 MHz to 2.3 GHz Where P is the maximum output power rating for the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey[1], should be less than the compliance level in each frequency range. Interference may occur in the vicinity of equipment marked with the following symbol:
Radiated RF IEC 61000-4-3: 2006 A1: 2007 A2: 2010	10 V/m 80 MHz to 2.7 GHz 80% AM modulation at 1kHz	10 V/m 80 MHz to 2.7 GHz 80% AM modulation at 1kHz	
Magnetic field immunity IEC 61000-4-8: 2009	30 A/m 50/60 Hz	30 A/m 50/60 Hz	

NOTE: Device complies with IEC 60601-1-2: 2014 Table 9 requirements tested to IEC 61000-4-3.
NOTE: 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, and electromagnetic site survey should be considered. If the measured field strength in the location in which the **Model C2-10XX** is used exceeds the applicable RF compliance level above, the **Model C2-10XX** should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary such as re-orienting or relocating the **Model C2-10XX**.

11.0 Specifications - Continued

NOTE: C2-10XX refers to any or all of the following models: C2-1001, C2-1002, C2-10V1, C2-10VB.

Models C2-10XX Manufacturer's Declaration-Electromagnetic Emissions		
Model C2-10XX systems are intended for use in the electromagnetic environment specified below. The customer or the user of the **Model C2-10XX** system should assure that it is used in such an environment.		
Emissions Test	**Compliance**	**Electromagnetic Environment/Guidance**
RF emissions CISPR 11: 2009 A1: 2010	Group 1	**Models C2-10XX** use 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.
RF emissions CISPR 11	Class A	**Models C2-10XX** are suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies building used for domestic purposes.
Harmonic emissions IEC 61000-3-2: 2014	Not applicable	
Voltage fluctuations/ flicker emissions IEC 61000-3-3: 2013	Not applicable	

Recommended Separation Distances Between Portable and Mobile RF Communications Equipment and Models C2-10XX			
Model C2-10XX systems are intended for use in the electromagnetic environment specified below. The customer or the user of the **Model C2-10XX** system should assure that it is used in such an environment.			
Rated Maximum Output Power of Transmitter (W)	Separation Distance According to Frequency of Transmitter(m)		
	150 kHz to 80 MHz $d=1.2\sqrt{P}$	80 MHz to 800 MHz $d=1.2\sqrt{P}$	800 MHz to 2.5 GHz $d=2.3\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23
For transmitters radiated at a maximum output power NOT listed above, the recommended separation 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:** At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies. **NOTE:** These guidelines may NOT apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.			

11.0 Specifications - Continued

Changes or modifications not expressly approved by Dabir Surfaces, Inc. could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformement ir la reglementation d'Industrie Canada, le present emetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inferieur) approuve pour l'emetteur par Industrie Canada. Dans le but de reduire les risques de brouillage radioelectrique a l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnee equivalente (p.i.r.e.) ne depasse pas l'intensite necessaire a l'etablissement d'une communication satisfaisante.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a hospital installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

12.0 Limited Warranty

Dabir Surfaces, lnc. warrants that the product ("Dabir Product") accompanied by this Limited Warranty, shall be free from defects in material and workmanship under normal use for a period of one (1) year. Except where prohibited by applicable law this warranty is valid, beginning from date of original purchase, for the specific period associated with the Dabir Product purchased, and is nontransferable and is limited to the original, end user purchaser. This warranty gives you specific legal rights, and you may also have other rights which vary under local laws.

Remedies

Dabir Surfaces, lnc. entire liability and your exclusive remedy for any breach of warranty shall be, at Dabir Surfaces, lnc. option, (1) to replace the Dabir Product, or (2) to refund the price paid, provided that the Dabir Product is returned to a location as specified by Dabir Surfaces, lnc. with a copy of the sales receipt, or dated itemized receipt, from an authorized reseller, and with a return authorization number provided by Dabir Surfaces, lnc. Shipping and handling charges may apply except where prohibited by applicable law. Dabir Surfaces, lnc. may, at its option, use new or refurbished or used parts in good working condition to replace any hardware product. Any replacement Dabir Product will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer or for any additional period of time that may be required in the end user's jurisdiction.

This warranty does not cover problems or damage resulting from (a) accident, abuse, misapplication, or any unauthorized repair, modification or disassembly; (b) improper operation or maintenance, usage not in accordance with product instructions or connection to improper voltage supply; or (c) use of consumables, such as replacement batteries, not supplied by Dabir Surfaces, lnc. except where such restriction is prohibited by applicable law.

How to Obtain Warranty Support

Before submitting a warranty claim, you must contact Dabir technical support at: support@dabir-surfaces.com or by calling (888) 559-3642 to verify the product failure and to receive a Return Material Authorization (RMA) number. **RETURNS WILL NOT BE ACCEPTED WITHOUT AN RMA NUMBER.** The addresses and customer service contact information for the Dabir Product can be found in the documentation accompanying your Dabir Product and on the web at www.dabir-surfaces.com. You must include a copy of the sales receipt, or dated itemized receipt, from an authorized reseller, along with a return authorization number provided by Dabir Surfaces, Inc. with your return. You must report any defect to Dabir Surfaces Inc. within the one (1) year period of the warranty.

The following information must be marked on the outside of each carton and/or pallet:

1. Shipper's name and address
2. Dabir Surfaces "Ship-to" address as listed below:

   Dabir Surfaces, Inc.
   Attention: Repair Dept. / RMA #_____
   7447 W. Wilson Ave.
   Harwood Heights, IL 60706 USA

12.0 Limited Warranty - Continued

Limitation of Liability
DABIR SURFACES, INC. SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, REVENUE OR DATA (WHETHER DIRECT OR INDIRECT) OR COMMERCIAL LOSS FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON YOUR DABIR PRODUCT OR FOR ANY OTHER CLAIM, EVEN IF DABIR SURFACES, INC. HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN ADDITION, TO THE EXTENT PERMITTED BY LAW, THE MAXIMUM LIABILITY OF DABIR SURFACES, INC. WITH RESPECT TO ANY DABIR PRODUCT FOR ANY CLAUSE WHATSOEVER (WHETHER BREACH OF CONTRACT OR WARRANTY, TORT OR OTHERWISE), IS LIMITED TO THE AMOUNT ACTUALLY PAID OR PAYABLE BY YOU FOR THE DABIR PRODUCT THAT GAVE RISE TO SUCH LIABILITY. THE FOREGOING LIMITATIONS SHALL APPLY EVEN IF THE PROVISIONS OF THIS AGREEMENT FAIL OF THEIR ESSENTIAL PURPOSE.

Some jurisdictions do not allow the exclusion or limitation of special, indirect, incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THE WARRANTIES SET FORTH HEREIN ARE IN LIEU OF AND TO THE EXCLUSION OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY AS TO THE MERCHANTABILITY OR FITNESS OF THE PRODUCT FOR A PARTICULAR PURPOSE OR AS TO ITS PERFORMANCE.

Any statement, description or specification in Company's literature is for the sole purpose of identification of products sold by the Company and imparts no guarantee, warranty or undertaking by Company of any kind. Components and accessories not manufactured by Company are not included in this warranty and may be warranted separately by their respective manufacturers. Some jurisdictions may not permit this disclaimer so the above disclaimer may not apply to you.

National Statutory Rights
Consumers have legal rights under applicable national legislation governing the sale of consumer goods. Such rights are not affected by the warranties in this Limited Warranty.

No Other Warranties
No Dabir dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

Registration
You do not need to register the product for the Limited Warranty to be effective.

Miscellaneous
This limited warranty shall be governed by and construed in accordance with the laws of State of Illinois, United States of America, as if performed wholly within the state and without giving effect to the principles of conflict of law. lf any portion hereof is found to be void or unenforceable, the remaining provisions of this limited warranty shall remain in full force and effect. This Limited Warranty constitutes the entire limited warranty extended by Dabir Surfaces, lnc. with respect to Dabir Patient Support System.

13.0 Contact Information

Electronic copies available at:

Instructions-for-Use:	www.dabir-surfaces.com/IFU
Model Number List:	www.dabir-surfaces.com/models
Dabir Approved & Unapproved Cleaners:	www.dabir-surfaces.com/cleaners

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Service Support
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PATENTS: www.dabir-surfaces.com/patents

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