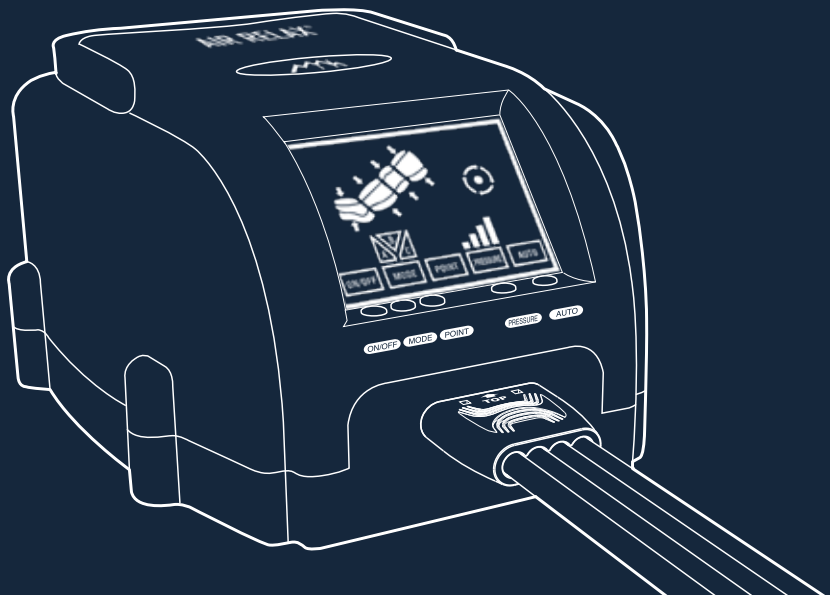


AIR RELAX®

USER MANUAL



Read all instructions before using the Air Relax system. Keep this manual near to the system for quick reference. This manual presents details required by users to prevent any danger or property loss for safe use of this system.

MODEL AR-1.0 / AR-2.0

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SAFETY INFORMATION

WARNING

- For your safety and to avoid property damage, please read this manual carefully and use as indicated. Non-compliance may cause serious injuries or death and or severe property damage. Do not use the system in any way other than the usage stated in the manual.
- This system is not recommended for people who have heart problems, vascular problems, or any abnormal physical conditions requiring the use of any medical device.
- Do not use this system if you are experiencing inflammation, an infection, open wounds or bleeding at or near the site of application.
- **NOT FOR CHILDREN.** This system is not intended for use by young children or persons with reduced physical ability, sensory or reasoning capabilities; incapacitated persons, unconscious persons; lack of experience and knowledge; at least 10 years old intensive reading experience (school), unless they have been given supervision or instruction by a responsible person concerning the use of this system to ensure that they can use this system safely. Close attention is necessary when used by or near children. Children under age 18 must be accompanied by an adult. This system is not suitable for children weighting less than 88 lb. or 40 kg.
- Health: limitation to the people mentioned in contraindication of user manual.
Nationality: Multiple, Patient is user: alert, mentally competent (The patient is an intended operator), Patient is not user: not relevant, unless patient is agitated.

WARNING

- Keep the system, including hoses and cords, away from children and pets.
- Do not use the system in the presence of flammable gases, including flammable anesthetics.
- Do not modify any part of the system.
- Do not use the system on heat generating material or near a heating device. This may cause the system malfunction and/or overheating.
- Do not drop, use any excessive force or place heavy weight upon the system. This may cause system malfunction and/or damage.

SAFETY INFORMATION

WARNING

- To avoid the risk of **electrical shock**, do not open any panels from the control unit. Opening the case **will** void the Air Relax warranty. **All** repair tasks should be performed only by authorized service personnel.
- To avoid the risk of **electrical shock**, do not attempt to repair or modify the power line cord. If the power line cord is damaged, contact an authorized service center.
- Circuit diagrams, components, parts and its descriptions; or other information related to the system **will** be provided upon request by an authorized service personnel.
- To avoid the risk of **electrical shock**, always turn off the system and disconnect the power line cord from its electrical outlet when not in use.
- To avoid the risk of **electrical shock**, do not use the system in near water, such as a kitchen, bathroom, sauna, or swimming pool.
- To avoid the risk of **electrical shock**, do not run the power line cord under carpeting and do not cover with throw rugs, runners, or similar coverings.
- To avoid the risk of **electrical shock**, do not route the power line cord under furniture or appliances. Arrange the power line cord away from traffic area and where it **will** not be tripped over.
- Do not place the system, power line cord, or any accessories where they could be damaged, present fall a hazard, or become an obstruction to others.
- When the system is in use, maintain a distance of at least 10 inches (25 cm) from the walls or adjacent objects and at least 12 inches (30 cm) above the system.
- Keep the system away from heating appliances such as ovens, microwaves, hot cooking utensils, or high pressure cookers. This may cause the system malfunction.
- This system is intended for consumer home use. **Commercial** use **will** cause premature breakdown of the system.
- If you experience severe pain, any abnormal symptoms, or want to remove pressure in an emergency during use, stop the system by pressing the power button and remove the garment(s) from your limb and consult your licensed healthcare practitioner, as required.
- Stop treatment in case of any change of the system performance.

 **CAUTION**

- Do not use the system beyond the specified temperature range: +50 °F to +104 °F (+10 °C to +40 °C).
- Do not use the system beyond the specified humidity range: 35 %rH – 85 %rH, non-condensing, but not requiring a water vapor partial pressure greater than 50 hPa and an atmospheric pressure range of 800 hPa to 1060 hPa (under 0.4km to over 2km from sea level).
- To prevent any damage to the system, keep it away from dust, lint, or any dirt.
- Use only accessories approved by the Manufacturer. Other accessories may damage the system or interfere with system function.
- The garment is not sterile, do not place directly against open wounds, sores, rashes, infections, or stitches. The garment may be applied over clothing.
- A layer of clothing between garment and skin is recommended.

LABELS

The following labels and symbols appear on the control unit, garments, manual, and/or packaging.

SYMBOL	DESCRIPTION	LOCATION	SYMBOL	DESCRIPTION	LOCATION
IP 21	Degree of protection against ingress of water	On base of control unit		Keep away from sunlight	On base of control unit and packaging
	Follow instructions for use	On base of control unit		Keep dry	On base of control unit and packaging
	Read instructions before use	On base of control unit and garment tag		Transportation & storage temperature limitation	On base of control unit and packaging
	Level of protection type BF equipment	On base of control unit		Transportation & storage humidity limitation	On base of control unit and packaging
	Double Insulation	On base of control unit		Transportation & storage atmospheric pressure limitation	On base of control unit and packaging
	Manufacturer	On base of control unit and garment tag		Fragile, handle with care	On packaging
	Date of Manufacture	On base of control unit		This side up	On packaging
	Separate collection for waste electrical and electronic equipment	On base of control unit and battery pack		Do not wash	On garment tag
SN	Serial number of the control unit	On base of control unit		Do not dry-clean	On garment tag
	Do not step	On base of control unit		Do not tumble dry	On garment tag
	Caution symbol	In manual		Do not bleach	On garment tag
	Warning symbol	In manual		Do not iron	On garment tag

INDICATION FOR USE

Air Relax Compressible Limb Sleeve System (Model: AR-1.0 / AR-2.0) is indicated for the temporary relief of minor muscle aches and pains and for temporary increase in circulation to the treated areas in people who are in good health. The Air Relax Compressible Limb Sleeve System (Model: AR-1.0 / AR-2.0) simulates kneading and stroking of tissues by using an inflatable garment.

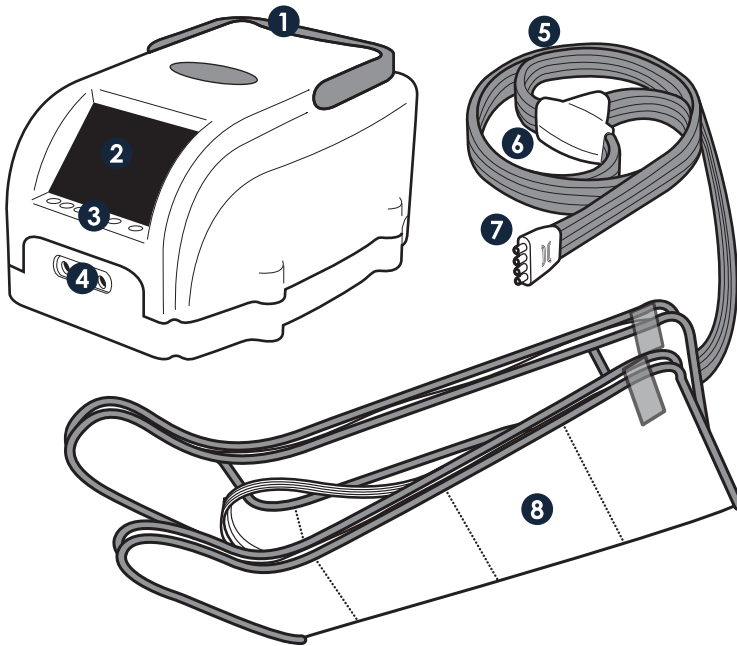
CONTRAINDICATIONS

- Do not use this system if you are experiencing inflammation, an infection, open wounds or bleeding at or near the site of application.
- Do not use this system on sensitive skin, swollen or inflamed areas, in the presence of poor circulation, where skin eruptions are present, or in the presence of unexplained calf or abdominal pain.
- Do not use this system if you are under the care of a physician or have a contraindication requiring the use of any medical device.
- Do not use this system if you have any of following conditions:
 - Acute pulmonary edema
 - Acute thrombophlebitis
 - Acute congestive cardiac failure
 - Acute infections
 - Osteoporosis
 - Deep vein thrombosis (DVT)
 - Episodes of pulmonary embolism
 - Wounds, lesions, or tumors at or near the site of application
 - Where increased venous and lymphatic return is undesirable at or in the vicinity of the treatment application because of lesions or tumors.
 - Bone fractures or dislocations at or near the site of application
- Do not use during pregnancy. Pregnant women should consult their health care provider before using this system.
- Do not use if you have blood clotting or subject to blood clotting.
- This system does not constitute medical treatment and is not a substitute for a medical examination or diagnosis. If you are dealing with a serious health condition check with your health care provider before using.

OPERATION

The Air Relax control unit takes air from the surrounding environment and sends it through silicone hoses into four individual air chambers inside of the Air Relax garment.

COMPONENTS



- | | |
|-------------------------|--------------------------------|
| 1. Handle | 5. Silicone Hose |
| 2. Display Screen | 6. T Connector |
| 3. Operation Buttons | 7. Hose Plug |
| 4. Hose Plug Receptacle | 8. Leg Garments (Applied part) |

COMPONENTS

- Handle : Uses for carrying the control unit.
- Display Screen : Displays the operation status.
- Operation Buttons : Allows a user to operate the system.
- Hose Plug Receptacle : Allows a hose plug to be connected to the control unit.
- Silicone Hose : Transfers the air from the control unit to the leg garments.
- T Connector : Splits the air from the control unit into the leg garments.
- Hose Plug : Connects the leg garments to the control unit.
- Leg Garments : Connected to the control unit through the hose bundle.
Four chamber leg garments are made of high quality nylon.

Leg Garment Sizing Guide

Measure the inseam from top of inside leg at crotch to the heel to select your size from the size chart below.

Leg Garment Size	Inseam	Height
Size 2	26 "-30"	5'3" - 5'7"
Size 3	30 "-34"	5'8" - 6'1"
Size 4	34 "-38" (Above)	6'2" Above

This sizing chart is approximate. If you are between sizes, we advise choosing the longer leg garment. The inseam gives more accurate result, not the height.

HOW TO USE THE AIR RELAX SYSTEM

WARNING

FOR YOUR SAFETY AND TO AVOID PROPERTY DAMAGE:

Read this manual carefully and use as indicated. Non-compliance may cause serious injuries or death and or severe property damage.



1. Set up the Control Unit

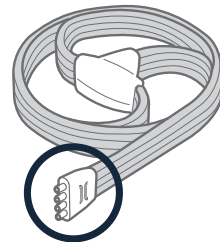
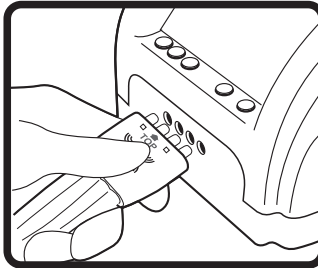
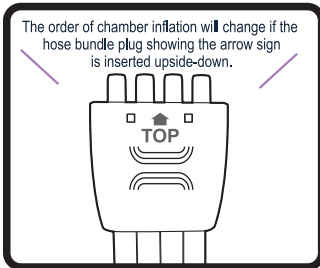
- The control unit should be placed on a stable flat surface from where it will not slip or fall. Position the control unit so that the user can easily reach it during sessions.
- Plug the power cord into an appropriate electrical wall outlet.

WARNING

Unspecified Voltage Adapter or Converter may cause overheating, explosion, electrical shock, or fire and will void the Air Relax warranty.

HOW TO USE THE AIR RELAX SYSTEM

2. Connect the Hose Plug to the Control Unit



Hose plug

- 1) The hoses should not be twisted or folded.
- 2) Connect the hose plug to the hose plug receptacle on the control unit making sure the arrow sign is facing up.
- 3) The hose plug should be connected fully to prevent air from leaking out.
(Make sure that there is no gap between the hose plug and the hose plug receptacle.)

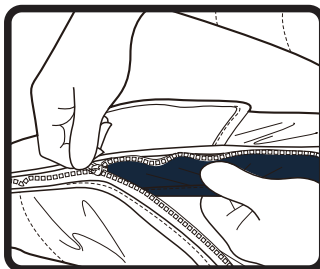
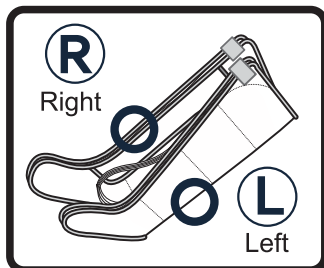
3. Put on the Garment

CAUTION

The garment is not sterile, do not place directly against open wounds, sores, rashes, infections, or stitches. A layer of clothing between garment and skin is recommended. Remove any jewelry or anklets from legs and feet before wearing the garment. DO NOT apply the leg garments on your arm.

HOW TO USE THE AIR RELAX SYSTEM

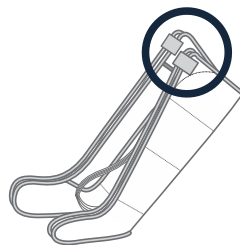
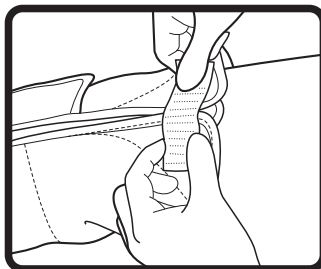
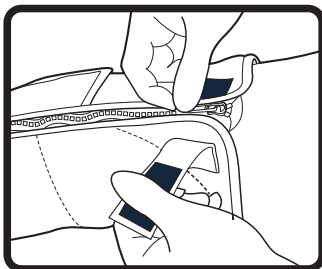
• Leg Garment



Protective cover

Use the protective cover to shield your skin from the zipper.

- 1) Make sure you have the “left” and “right” garments placed on your legs accordingly.
- 2) Open the Velcro strap and unzip the garment halfway down.
- 3) To put on the leg garment, insert your foot into the garment.
- 4) Pull the top of leg garment towards your torso.
- 5) Make sure that your feet are positioned on the inside of the garment properly.
- 6) Close the zipper all the way up to the top, being careful that your clothes are not caught in the zipper.
- 7) Place the zipper flat as in the picture and secure the Velcro strap firmly.



⚠ CAUTION

Attach the Velcro strap to prevent the air pressure from causing the zipper to unzip (pop) while the upper chambers are filling up. If the Velcro strap is detached or the zipper is unzipped while using the device, simply shut off the control unit and secure the zipper as suggested above.

HOW TO USE THE AIR RELAX SYSTEM

4. Start the Session

- The default setting is A mode (Peristaltic Cycle), 15 minutes and pressure level 1.



- 1) Press the ON/OFF button on the control unit to turn on the system.
- 2) Press the MODE button on the control unit to select the mode.
- 3) Press the PRESSURE button on the control unit to adjust the pressure level.
- 4) Start at low pressure setting. The massage session becomes more intense as the pressure level is increased.

- Light Massage Session : Level 1
- Medium Massage Session : Level 2-3
- Intense Massage Session : Level 4

5. Recommended Session

- Pre-Training : 15 min on Mode A or B at pressure level 1-2
- Post Training : 15 min on Mode A, 15 min on Mode B, 15 min on Mode C at pressure level 3-4
- Immediate Post Activity : 15 -30 min on Mode B, Mode C for 15 min at pressure level 2-4

6. Monitor the Session

- Wait for 3 seconds without pressing any buttons to allow the system to begin to operate.
- If any button is pressed to change settings during the session, a new 15 minute session will start with the new settings from the time the last button is pressed.

7. End the Session

- When the session is completed, the control unit will turn off automatically.
- Allow the garment to deflate for 30 seconds before you remove it.
- Unplug the power cord from an electrical wall outlet.
- Remove the hose plug from the control unit, then remove the garments from your limb.

CAUTION

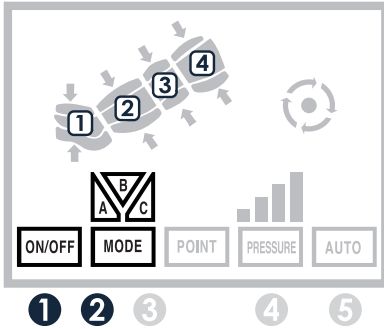
Discontinue use if you experience pain or discomfort, or if there is onset of bruising, irritation or redness during or after the session and consult your physician immediately.

DISPLAY SCREEN



- **CHAMBERS** : Displays four individual air chambers, as the display lights up the chamber that is displayed will fill with air.
- **ON/OFF** : Displays the power status.
- **MODE A,B,C** : Displays the operation cycle mode that is currently selected.
- **POINT** : Displays status of POINT operations.
Selected area on the chamber lights up.
- **PRESSURE** : Displays the level of air pressure.
- **AUTO** : Displays and operates when the AUTO button is pressed.

OPERATION BUTTONS



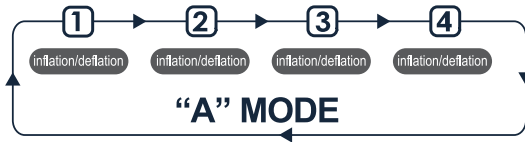
1 ON/OFF Button

- Use this button to turn the control unit on and off.
- When the control unit is first powered on, the Mode A is selected by default at pressure level 1.
- It turns off after 15 minutes automatically as long as other buttons are not pressed during a session.

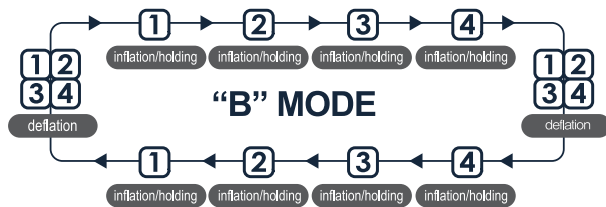
2 MODE Button

- Use this button to access selection of a A, B, C cycle mode.

- Peristaltic Cycle Mode



- Sequential Cycle Mode



- Full Massage Cycle Mode

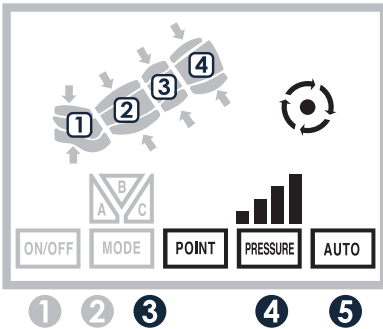
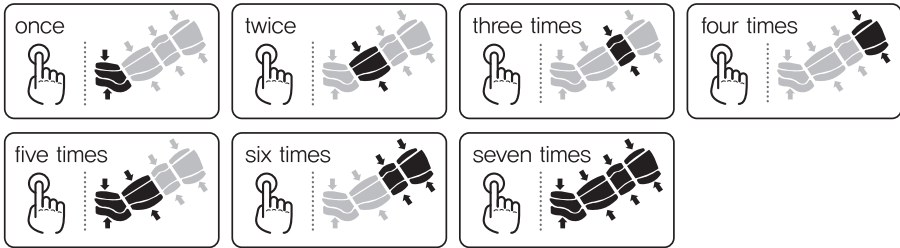


- In case the POINT or MODE button is pressed during operation, the MODE light turns off and the newly selected mode turns on.

OPERATION BUTTONS

3 POINT Button

- Use this button to select specific chambers.



4 PRESSURE Button

- Use this button to adjust the pressure level. This will change the intensity of the massage.
- A lower pressure setting will apply a light massage, while a higher-pressure setting will apply a more intense massage. If the massage is too intense, lower the pressure level using this button.
- Select the pressure starting from low (level 1) and adjust the pressure if necessary.
- The default pressure setting is level 1.

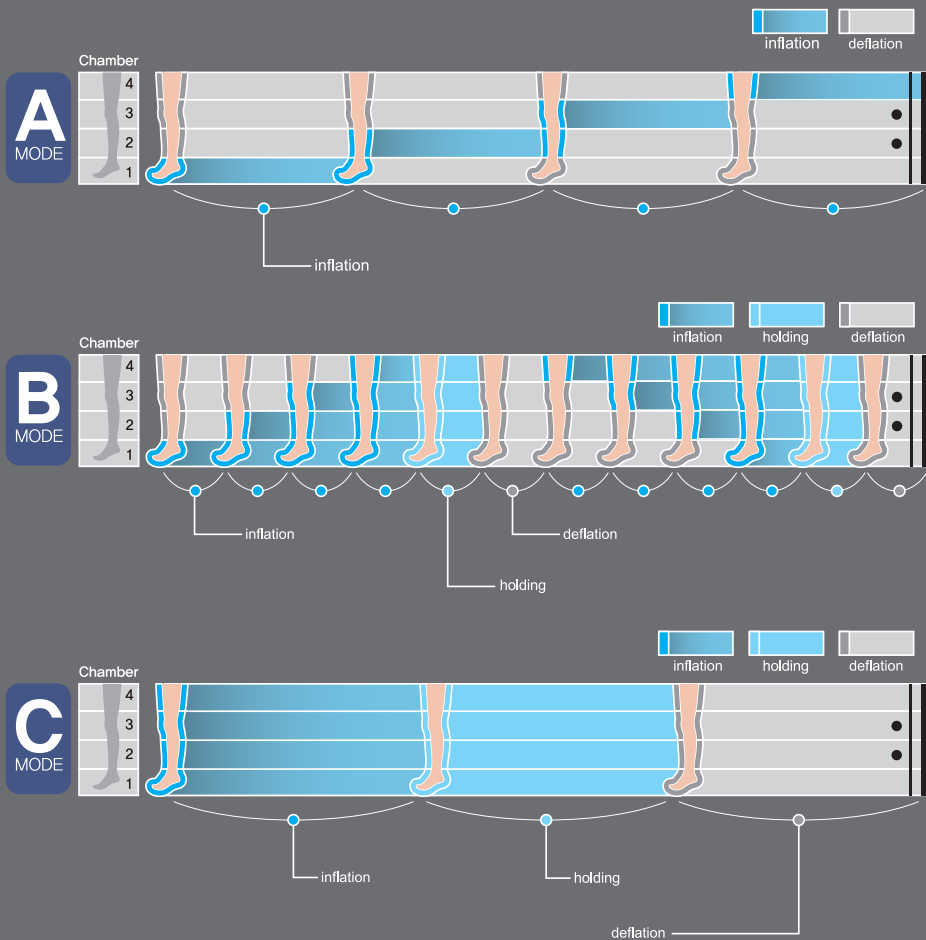
Level 1: 60 mmHg Level 2: 120 mmHg
Level 3: 180 mmHg Level 4: 230 mmHg

5 AUTO Button

- Use this button to select the Auto cycle mode.
- When the AUTO button is pressed, the mode B is selected by default at pressure level 3.

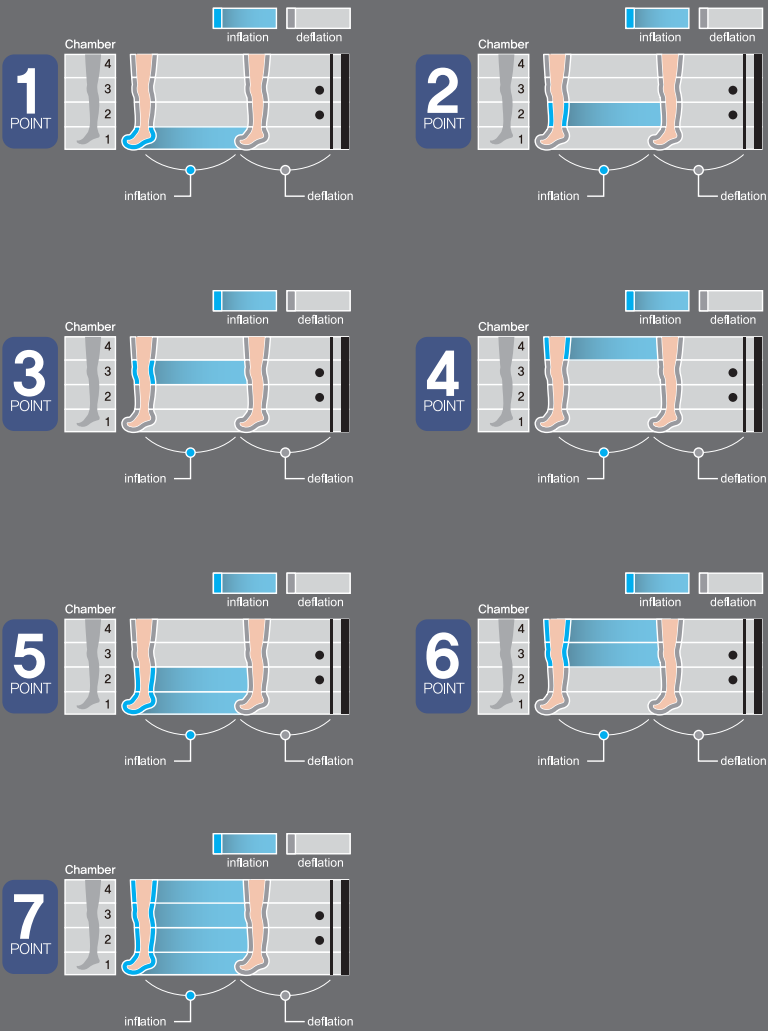
OPERATION CYCLES

OPERATION CYCLE OF MODE



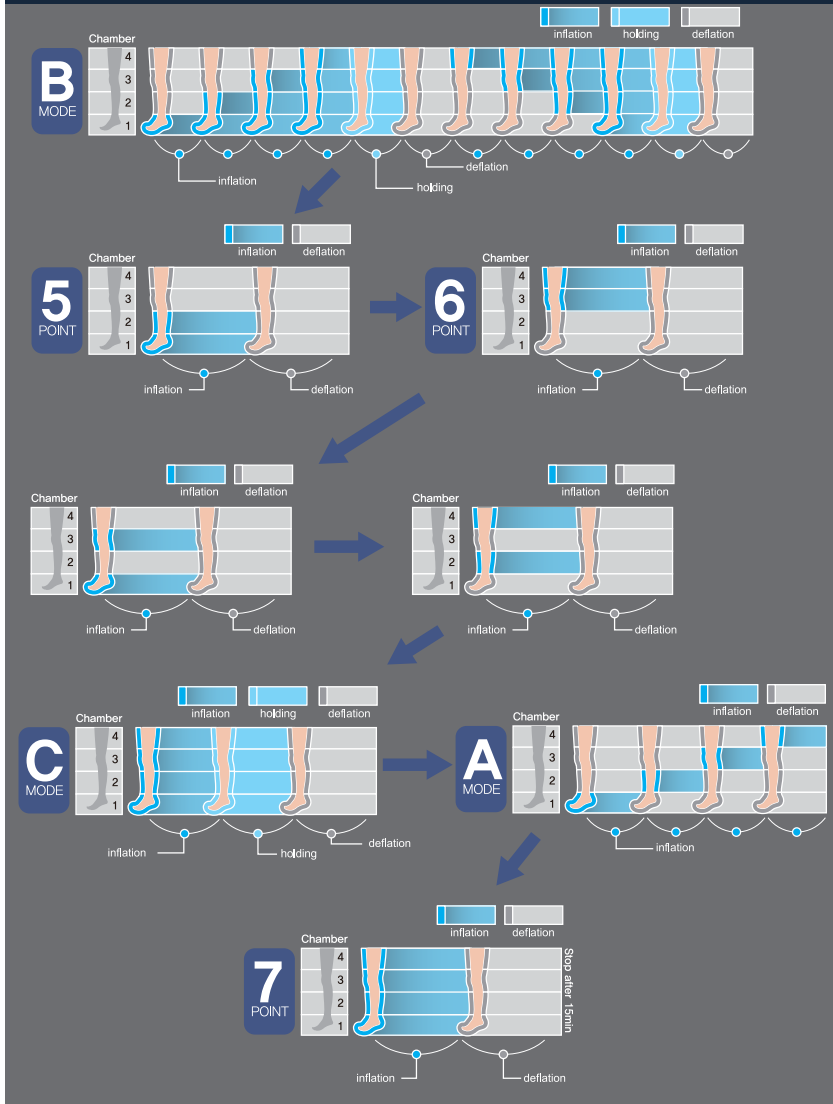
OPERATION CYCLES

OPERATION CYCLE OF POINT



OPERATION CYCLES

OPERATION CYCLE OF AUTO



MAINTENANCE

- To avoid the risk of electrical shock, always turn off the control unit and disconnect the power cord while in maintenance.
- Control Unit: The exterior of the control unit can be cleaned with a soft, slightly damp cloth.

CAUTION

The control unit is not a waterproof device. Do not apply a direct stream of any liquid onto the control unit, submerge the control unit, or allow any liquid to pool on the surface of the front panel of the control unit.

The control unit requires routine maintenance. Clean at least once every three months control unit, garments, power cord and hose bundle.

- Hose Bundle: The surface of the hose bundle can be cleaned using a soft, slightly damp cloth.
- Garment: Gently wipe the external and internal surfaces the garments using a soft cloth, warm water not to exceeding 100 °F and a mild detergent.
Wipe dry using a soft towel only.
Allow the garment to air dry completely before use.

CAUTION

- Surface wipe only.
- Do not machine wash.
- Do not dry clean.
- Do not use bleach.
- Do not iron, tumble or force heat dry.

STORAGE

- Store in a cool, dry, and well-ventilated area. Optimum storage is achieved at room temperature.
- System Operating temperature: +50 °F to +104 °F (+10 °C to +40 °C)
- System Storage temperature: -4 °F to +158 °F (-25 °C to +70 °C)
- Relative Humidity: 15 %rH to 90 %rH non-condensing
- Atmospheric pressure: 700 hPa to 1060 hPa (under 0.4km to over 2km from sea level)

CAUTION

Do not keep in extreme cold or hot temperatures below -4 °F or above +158 °F (below -25 °C or above +70 °C). Do not leave in a hot or freezing car. Do not leave the control unit in direct sunlight.

TROUBLESHOOTING

Problem	Cause	Solution
The control unit does not turn on.	<ul style="list-style-type: none"> - No electricity - Power cord not plugged in correctly - Internal malfunction 	<ul style="list-style-type: none"> - Check the electrical wall outlet. - Verify power cord is securely plugged into an appropriate electrical wall outlet. - Contact Air Relax.
The control unit does not pump.	<ul style="list-style-type: none"> - Internal malfunction 	<ul style="list-style-type: none"> - Contact Air Relax.
The garments do not fully inflate.	<ul style="list-style-type: none"> - Damaged connectors - Damaged hose bundles - Punctured garments - Internal malfunction 	<ul style="list-style-type: none"> - Check for physical damage on connectors. - Check hose bundles for kinking, twisting and folding. - Check if hose bundles are securely connected to the control unit, garments and connectors. - Check for punctures on garments. - Contact Air Relax.
An irregular noise.	<ul style="list-style-type: none"> - Uneven surface - Internal malfunction 	<ul style="list-style-type: none"> - Make sure the control unit is standing evenly on all four of its bumpers. - Contact Air Relax.

WARRANTY

The Air Relax system/accessories are warranted by the Manufacturer, against manufacturing defects in material and workmanship for a period of one year from the date of purchase from Air Relax or an Air Relax authorized reseller. In the event of any defect occurring during the warranty period, the Manufacturer will, at its option, (a) correct the defect by repair or by replacement of applicable part or component that fails as a result of such defect, without charge for the part and labor; or (b) replace the device with one of the same or then current design. The Air Relax system includes the control unit, garments, and hose bundles.

The forgoing warranty does not cover normal wear and tear or cosmetic damage, and are void if the device/accessories are not used in accordance with the User Manual, are otherwise misused or modified in any way, and or repaired by anyone other than an authorized service representative of the Manufacturer. This warranty expressly excludes transportation, shipping or insurance costs, or defects, damages or failure resulting from misuse, abuse, improper or abnormal usage, or neglect.

EXCEPT AS PROVIDED ABOVE, AIR RELAX MAKES NO EXPRESS WARRANTY OR ANY IMPLIED WARRANTY, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE OR USE, AND ARE LIMITED IN DURATION AS STATED ABOVE EXCEPT AS EXPRESSLY STATED ABOVE, AIR RELAX SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO ITS CUSTOMERS, OR ANY OTHER PERSON OR ENTITY, WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF THE USE, INABILITY TO USE OR ANY BREACH OF THIS WARRANTY, INCLUDING BUT NOT LIMITED TO ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, PROPERTY OR INCOME, OR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND.

Some countries or states do not allow the exclusion or limitations of incidentals or consequential damages, so the above limitations or exclusion may not apply to you. The warranty gives you specific legal rights, and you may also have other rights which vary from country to country or state to state. In the event of a product defect covered by the foregoing warranty during the applicable warranty period send the product to an Air Relax authorized service center, postage prepaid and insured and an indication of the nature of the defect identified.

All replacement parts and products become the property of Air Relax. New or reconditioned parts and products may be used in the performance of a Warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period only. You will be charged to repair or replace parts and products made after the expiration of the applicable Warranty periods.

RETURN POLICY

This policy is only applicable if you are the end user and you purchased the equipment directly from Air Relax or an Air Relax authorized reseller.

In the unlikely event that you are not satisfied with your purchase, you may return it within (30) days of the purchase date. All returns and exchanges are subject to the conditions listed below.

1. Returns and exchanges must have a Return Merchandise Authorization (RMA) number. Obtain an RMA number by contacting Air Relax or an Air Relax authorized reseller. Returned items without an RMA will not be eligible for a credit to your account.
2. Returns must be received within 15 days of RMA issuance.
3. Product and packaging must be returned in new and undamaged condition. Any product(s) showing signs of wear or being soiled in any way will be deemed “unacceptable” and you will be so notified. Unacceptable returns/or exchanges may be reshipped to you following payment of an inspection/shipping fee.
4. Returned items will be subject to a 10% restocking fee. A returned item is an item that is being sent back for a refund.
5. If you refuse delivery of your order for any reason, you will be refunded the cost of your order less the shipping fees once your item is received and inspected.
6. All partial or full refunds will be posted to the credit card used for purchase.
7. Air Relax is not responsible for items lost or damaged during shipping.

RETURN SHIPPING DIRECTIONS

Step 1: Contact Air Relax or an Air Relax authorized reseller to obtain a Return Merchandise Authorization (RMA) number.

Step 2: Place item(s) with original packaging and all original shipping documentation inside the shipping box. Be sure to include your name, order number (if applicable), contact information, reason for return/exchange, and RMA number in the shipment so that we can properly process your return/exchange.

Step 3: Ensure your name, address and RMA number are also on the outside of the shipping box, and ship to Air Relax or an Air Relax authorized reseller.

Step 4: Ship your return with package tracking and insurance. Air Relax is not responsible for items lost or damaged during shipping.

Registering your product will help us provide you with quicker and more efficient service and support and assure you get the most out of your warranty.

Register your product at <https://www.air-relax.com/pages/registration>

SPECIFICATIONS

AIR RELAX MODEL AR-1.0 / AR-2.0	
Rated Voltage	120 V~, 60 Hz
Power Consumption	60 VA
Type of protection against electric shock	Class II
Degree of protection against electric shock	Type BF
Degree of protection against ingress of water	IP21
Degree of safety of application in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide	Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.
mode of operation	Non-continuous (On: 15 min, Off: 15 min)
Time	15 minutes
Pressure Range	60 mmHg – 230 mmHg
Dimensions (Control Unit)	9.4 X 4.7 X 7.4 Inch (240 X 120 X 190 mm)
Weight (Control Unit)	5.2 lbs. (2.3 kg)

Model		Serial Number	
Date of Purchase		Warranty Period	1 Year

ELECTROMAGNETIC COMPATIBILITY

The Air Relax system has been evaluated to international standard EC 60601-1-2, Medical electrical equipment – Part 1-2: General requirements for basic safety and essential performance – Collateral Standard: Electromagnetic disturbances – Requirements and tests.

The Medical Electrical Equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided here within the accompanying documents. Portable and mobile RF communication can affect the Medical Electrical Equipment.

- Electromagnetic Emissions

model AR-1.0 / AR-2.0 - electromagnetic emissions - manufacturer declaration

This MODEL AR-1.0 / AR-2.0 is intended for use in the electromagnetic environment specified below. The customer or the user of the MODEL AR-1.0 / AR-2.0 should assure that it is such an environment.

Emissions Test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 1	The model AR-1.0 / AR-2.0 uses RF energy 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 B	
Harmonic emissions IEC 61000-3-2	Complies	The model AR-1.0 / AR-2.0 is suitable for use in all establishments, including domestic establishments and those directly connected to the public low voltage power supply network that supplies buildings used for domestic purposes.
Voltage fluctuations/flicker emissions IEC 61000-3-3	Complies	

ELECTROMAGNETIC COMPATIBILITY

- Electromagnetic Immunity


model AR-1.0 / AR-2.0 is intended for use in the electromagnetic environment specified below. The customer or the user of model AR-1.0 / AR-2.0 should assure that is used in an environment.

IMMUNITY test	IEC 60601 test level	Compliance level	Electromagnetic environment
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 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	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV line(s) to mode ±2 kV line(s) mode	± 1 kV differential mode ±2 kV common mode	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	<5% UT (>95% dip in UT) for 0,5 cycle 40% UT (60% dip in UT) for 5 cycles 70% UT (30% dip in UT) for 25 cycles <5% UT (>95% dip in UT) for 5 s	<5% UT (>95% dip in UT) for 0,5 cycle 40% UT (60% dip in UT) for 5 cycles 70% UT (30% dip in UT) for 25 cycles <5% UT (>95% dip in UT) for 5 s	Mains power quality should be that of a typical commercial or hospital environment. If the user of model AR-1.0 / AR-2.0 requires continued operation during power mains interruptions, it is recommended that model AR-1.0 / AR-2.0 be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

NOTE UT is the a.c. mains voltage prior to application of the test level.

ELECTROMAGNETIC COMPATIBILITY

model AR-1.0 / AR-2.0 is intended for use in the electromagnetic environment specified below. The customer or the user of model AR-1.0 / AR-2.0 should assure that is used in an environment.

IMMUNITY test	IEC 60601 test level	Compliance level	Electromagnetic environment
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms	<p>Portable and mobile RF communications equipment should be used no closer to any part of MODEL AR-1.0 / AR-2.0, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.</p> <p>Recommended separation distance</p> $d = \left[\frac{3.5}{V_1} \right] \sqrt{P}$ $d = \left[\frac{3.5}{E_1} \right] \sqrt{P} \quad 80 \text{ MHz to } 800 \text{ MHz}$ $d = \left[\frac{7}{E_1} \right] \sqrt{P} \quad 80 \text{ MHz to } 2.5 \text{ GHz}$ <p>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 metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, a should be less than the compliance level in each frequency range.</p> <p>b  Interference may occur in the vicinity of equipment marked with the following symbol.</p>
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2,5 GHz	3 V/m	

NOTE At 80 MHz and 800 MHz, 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.

- a.** 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 model AR-1.0 / AR-2.0 is used exceeds the applicable RF compliance level above, model AR-1.0 / AR-2.0 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating model AR-1.0 / AR-2.0.
- b.** Over the frequency range 150 kHz to 80 MHz, field strengths should be less than [V1] V/m.

ELECTROMAGNETIC COMPATIBILITY

Recommended separation distances between portable and mobile RF communications equipment and the model AR-1.0 / AR-2.0

model AR-1.0 / AR-2.0 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of model AR-1.0 / AR-2.0 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the model AR-1.0 / AR-2.0 as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter W	Separation distance according to frequency of transmitter m		
	150kHz to 80MHz $d = \left[\frac{3.5}{V_1} \right] \sqrt{P}$	80MHz to 800MHz $d = \left[\frac{3.5}{E_1} \right] \sqrt{P}$	800MHz to 2.5GHz $d = \left[\frac{7}{E_1} \right] \sqrt{P}$
0.01	0.116	0.116	0.233
0.01	0.369	0.369	0.737
1	1,166	1,166	2,333
10	3,687	3,687	7,378
100	11,660	11,660	23,333

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (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.

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