MUELLER® RECOVERYCARE®

REVIVE™

Do more than recover, REVIVE.™

M4
CONSOLE

Model 737R User Manual

Mueller®

Dist. by:

MUELLER SPORTS MEDICINE, INC.
1 Quench Drive, P.O. Box 99,
Prairie du Sac, WI 53578 USA
1-800-356-9522 • 608-643-8530
©2022 Mueller Sports Medicine, Inc.

L98005H4MR-A0

Table of Contents

1. Important Safety Information 1
2. Revive™ M4 Specifications and Dimensions 3
3. Labels 4
4. Indications for Use 6
5. About Revive™ M4 6
6. Components of the Revive™ M4 System 13
7. How to Operate the Revive™ M4 System 16
8. Using the REVIVE™ Mobile Application 44
9. Maintenance and Storage 69
10. Troubleshooting 72
11. Troubleshooting Wireless Connection Problems 75
12. Warranty and Contact Information 75
13. Bluetooth Wireless Technology Information 76
14. EMC Manufacturer Declarations 77

1. Important Safety Information

Read all instructions before using the Revive™ M4 system for the first time.

Warning: Contraindications for Use

- This system is intended for use by people in good health. This system is not recommended for people who have heart problems, or vascular problems, have a condition requiring the use of any medical device, or have any condition that may affect their normal well-being.
- If you are, or may be, pregnant, consult with your physician before use.
- Do not use this system over insensitive or numb areas, or in the presence of poor circulation. Do not use if you have been diagnosed with blood clots, deep vein thrombosis or phlebitis. This system should not be used over swollen or inflamed areas or skin eruptions. Do not use in the presence of unexplained calf pain.
- Consult your physician prior to use.

Safety Warnings and Precautions

Warning:

- **Explosion Hazard**: Do not use the Revive™ M4 system in the presence of flammable gases, including flammable anesthetics.
- **Electric Shock Hazard**: Do not allow liquid to enter any part of the Revive™ M4 Console. Do not immerse. To clean, follow instructions in Chapter 9 - Maintenance and Storage.
- **Electric Shock Hazard**: To prevent electric shock, do not open the Console. Do not attempt to service the Console yourself. All maintenance tasks should be performed only by REVIVE™ trained and authorized service personnel. Service by unauthorized personnel shall void any warranty.
- Stop treatment in case of any change of the Revive™ M4 system performance.
- Use the Revive™ M4 Console only with Revive™ M4 system garments and accessories.
- Do not modify any part of the Revive™ M4 system.
- The equipment should not be used adjacent to or stacked with other equipment. In case adjacent or stacked use is necessary, the equipment should be observed to verify normal operation in the configuration in which it is used.
- The Revive™ M4 system includes small parts. To avoid choking, do not swallow, and keep away from children and pets.

Note:

This console was tested for compliance with safety performance standards that apply to electro-medical devices:

- Electrical Safety: IEC 60601-1 Ed. 3.1
- Electromagnetic Compatibility: IEC 60601-1-2 Ed. 4.0
- Home-use Devices: IEC 60601-1-11 Ed. 2.0

Caution:

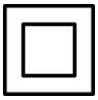
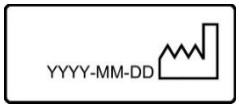
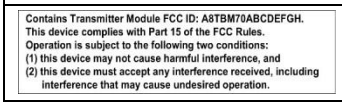
- Do not operate the Revive™ M4 system during transit.
- Do not store or transport the Revive™ M4 system beyond the specified temperature, humidity, and atmospheric pressure ranges (see Chapter 9 - Maintenance and Storage).
- Do not use the Revive™ M4 system beyond the specified temperature range: 10–30°C (50–86°F).
- Do not use the Revive™ M4 system beyond the specified humidity range: 30–85%rH, non-condensing.
- Use the Revive™ M4 system up to 3000m above mean sea level.
- To prevent any damage to the Revive™ M4 system, keep it away from dust, lint, and dirt. Keep away from sources of heat or moisture.
- Do not inflate the garment without wearing it over the intended body area. Do not inflate the garment "on empty". Doing so can damage the garment.
- To prevent any damage to equipment, use only accessories, detachable parts, and materials described in this User Manual.
- While in use, place the Console on horizontal firm surface only. Do not place the Console on bed, blanket, mattress, pillow, or soft furniture. Do not cover the Console.
- Use only accessories approved by the manufacturer (Mego Afek AC Ltd.). Other accessories may damage the system or interfere with system function.
- The equipment is to be installed and put into service according to the EMC information provided in Chapter 14 - EMC Manufacturer Declarations.
- Portable and mobile RF communication equipment may affect the equipment.

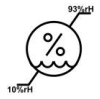
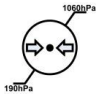
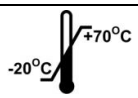
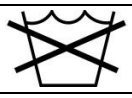
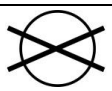
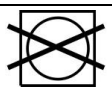
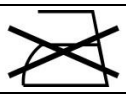
2. Revive™ M4 Specifications and Dimensions

Model: 737R, appliance coupler, transportable, rated: 100-240 VAC, 50-60 Hz, internal backup battery: 11.1V, 5000 mAh	
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	Continuous
Treatment duration	10–90 minutes
Environmental Conditions	Normal: 10–30°C, 30–85% rH, 700–1060 hPa
Pressure Range	20–100 mmHg
Dimensions	22 cm × 17 cm × 13 cm (8.6" × 6.7" × 5.1")
Weight	1.5 kg (3.3 lbs.)

3. Labels

The following labels and symbols appear on the Console, garments and/or packaging.

Symbol	Description	Location
IP21	Degree of protection against ingress of water	On Console base
	Read instructions before use	On Console base
	Read instructions before use (for China only)	On Console base
	Read instructions before use	On garment label
	Level of protection type BF applied part	On Console base
	Double insulation	On DC power adapter
	Class III equipment Equipment relying on limitation of voltage to extra-low-voltage (ELV) values as provision for basic protection and with no provision for fault protection.	On Console base
	Direct current	On Console base
	Manufacturer's name and address	On garment label and Console base
	Date of Manufacture	On Console base
	Unique Device Identification (UDI)	On Console base and package, and garment bag and package
	Separate collection for waste electrical and electronic equipment **Note:** For more information about disposal of equipment, its parts and accessories, please contact your local distributor.	On Console base
	Serial number of the console	On Console base
	FCC CFR 47 Telecommunications, Part 15 statement	On Console base

Symbol	Description	Location
Contraindications for use • This system is intended for use by people in good health. This system is not recommended for people who have heart problems, or vascular problems, have a condition requiring the use of any medical device, or have any condition that may affect their normal well-being. • If you are, or may be, pregnant, consult with your physician before use. • Do not use this system over insensitive or numb areas, or in the presence of poor circulation. Do not use if you have been diagnosed with blood clots, deep vein thrombosis or phlebitis. This system should not be used over swollen or inflamed areas or skin eruptions. Do not use in the presence of unexplained calf pain. • Consult your physician prior to use.	Contraindications label	On package
	Fragile, handle with care	On package
	Keep dry	On package
	This side Up	On package
	Keep away from sunlight	On package
	Transportation & storage humidity limitation	On package
	Transportation & storage atmospheric pressure limitation	On package
	Transportation & storage temperature limitation	On package
	"ON" (power)	On power switch
	"OFF" (power)	On power switch
	Do not wash	On garment tag
	Do not dry-clean	On garment tag
	Do not tumble dry	On garment tag
	Do not bleach	On garment tag
	Do not iron	On garment tag

4. Indications for Use

The Revive™ M4 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 Revive™ M4 simulates kneading and stroking of tissues by using an inflatable garment.

5. About Revive™ M4

Revive™ M4 is intended for use by people in good health. As noted above, Revive™ M4 simulates the kneading and stroking action of manual treatment by use of an inflatable garment that fills and deflates, applying a directional compress-and-release treatment. This soothing treatment action temporarily increases circulation in the areas to which the garment is applied, and temporarily relieves muscle aches and pain caused by fatigue or overexertion.

Revive™ M4 Programs

The chambers in the Revive™ M4 garment overlap for fluent, comfortable treatment without gaps. Pressure level, treatment time, hold time, and pause time may be adjusted.

The Revive™ M4 operates one or two garments.

Revive™ M4 has five programs:

- Recover
- Warm-up
- Isolation
- Interval
- Custom (Sequential, ISO, Wave, or Flow)

These programs are described in the following sections.

Recover and Warm-up Programs

Recover and Warm-up use the Sequential mode that applies a directional treatment, beginning distally and progressing towards the torso, then releasing (see Figure 1).

This applies a deep, slow treatment.

- Recover is recommended for after activity.
- Warm-up is recommended before activity.

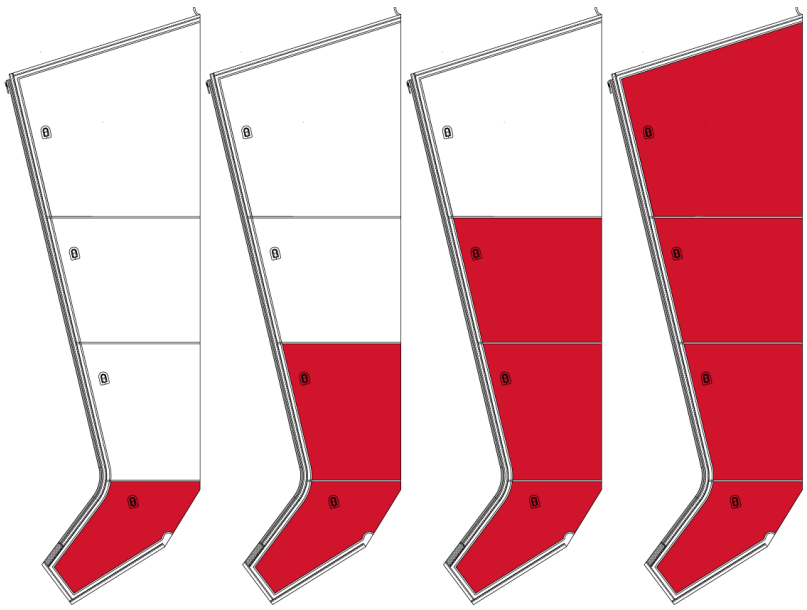


Figure 1 - Sequential Mode

Isolation

Isolation uses the ISO cycle providing use-defined two chamber coverage.

There are three options (see Figure 2).

The user can select the pair of chambers (zones) to be inflated:

- Chambers 1 and 2 – Distal zone
- Chambers 2 and 3 – Mid zone
- Chambers 3 and 4 – Proximal zone

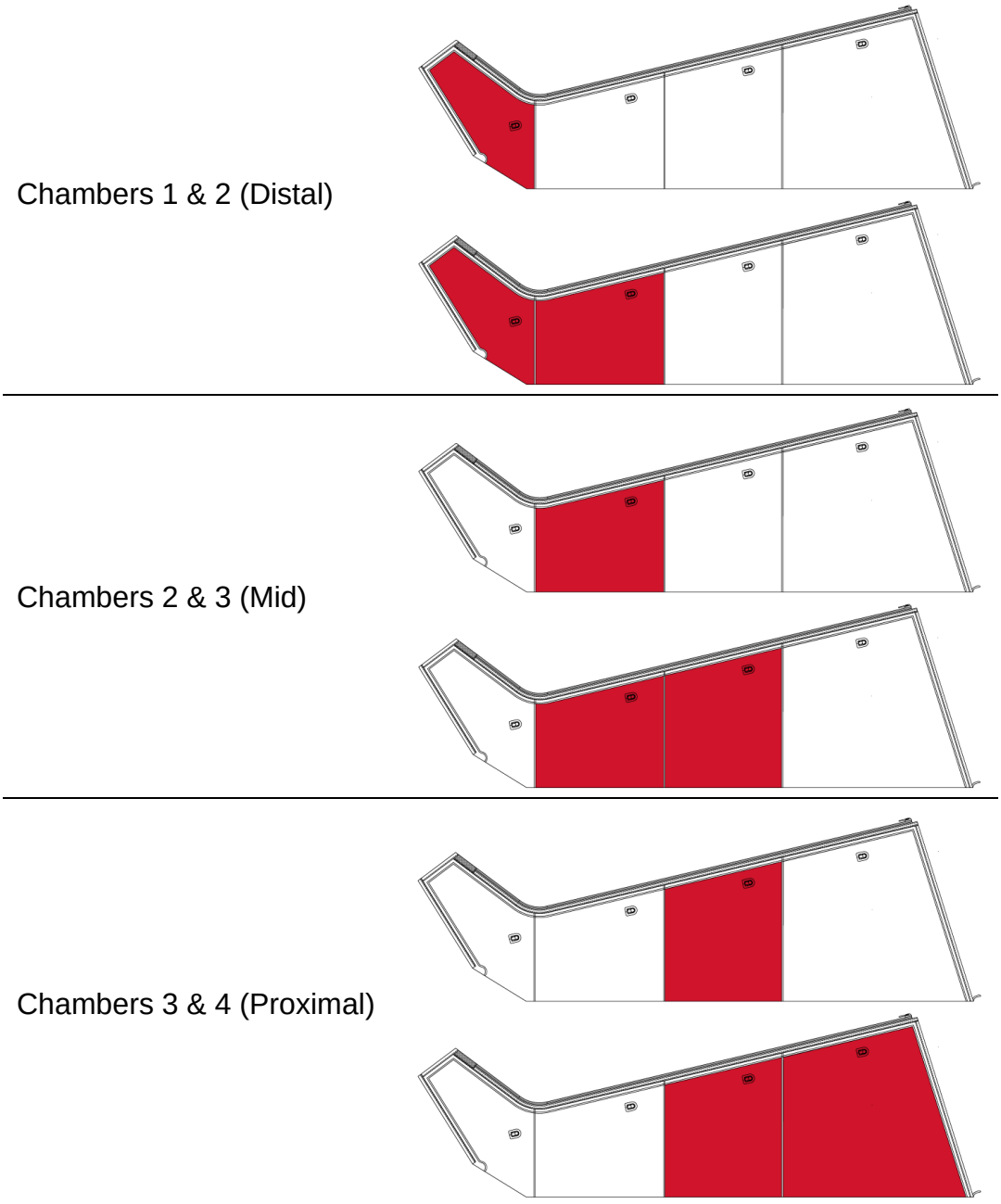


Figure 2 - ISO Cycle Mode

Interval

Interval applies periods of inflation (**Time On**) using the Sequential mode (see Figure 1) alternated with intervals of no inflation (**Time Off**).

Time On alternates with intervals of Time Off for a treatment time of up to 8 hours.

Time On (in minutes), Time Off (in minutes), and run time (in hours) are programmable.

During Time Off, the ❚❚ icon is displayed.

Custom

Custom program allows the user to select Sequential (see Figure 1), ISO (see Figure 2), Wave (see Figure 3), or Flow (see Flow).

During treatment, the treatment parameters can be changed, but not the selected cycle.

Wave - As the proximal chamber inflates, the distal chamber starts to deflate, so at any one time a small area is being compressed.

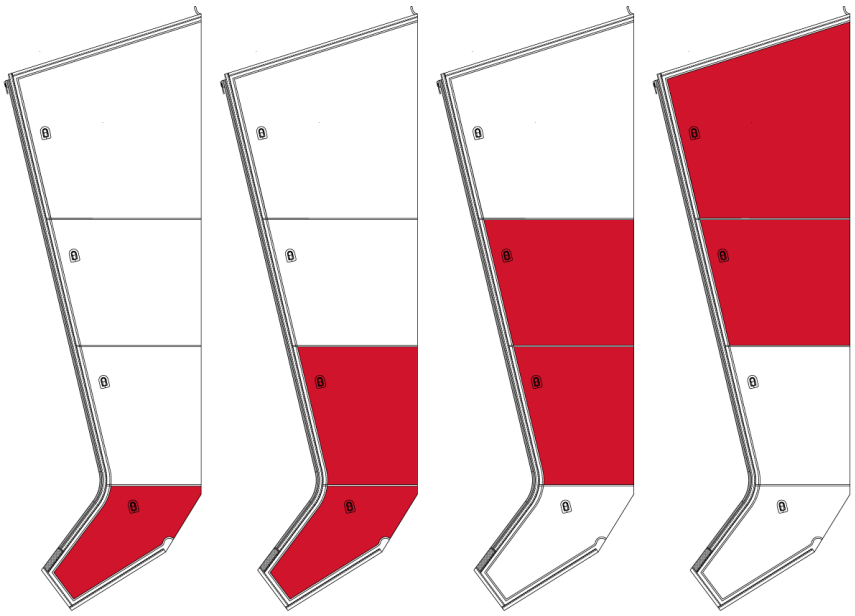
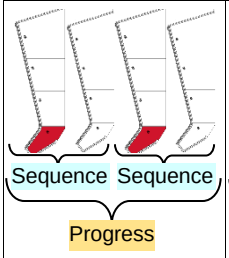
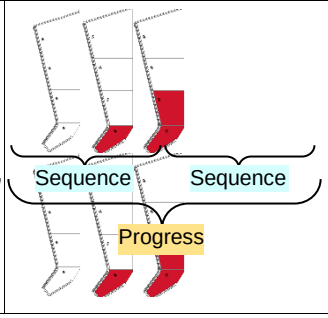
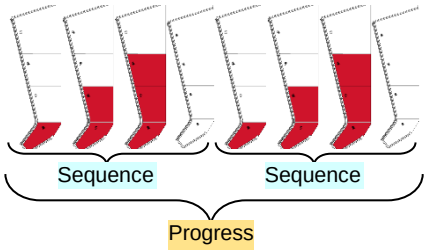
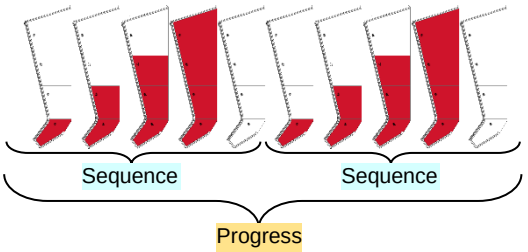


Figure 3 - Wave Cycle Mode

Flow

The Flow Cycle is described in the following table:

Chamber 1	Chamber 2	Chamber 3	Chamber 4
			

Sequence – instance of inflation and release
Progress – advancement of sequences

Four sequences exist. Each sequence is determined by the previous chamber inflated.

Flow has an associated **Frequency** parameter that determines the number of sequences.

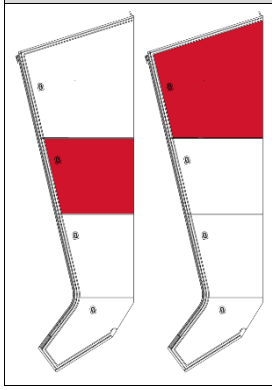
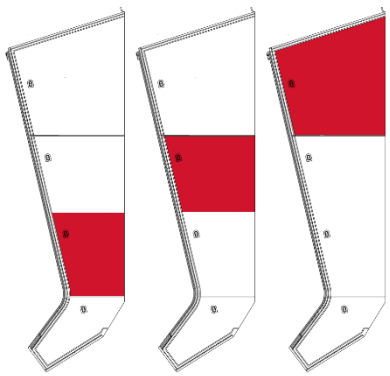
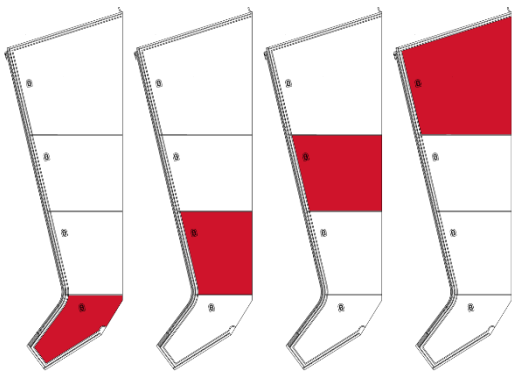
The user can set Frequency between 1 and 8. The default setting is 2.

Pretreatment

Pretreatment can be added to the beginning of the cycle mode set in the Custom Program only.

Pretreatment treats the proximal areas first, decongesting them so that they can receive the lymph fluid that is mobilized during the Sequential or Peristaltic cycles. A specific pattern is applied, and the duration varies according to garment size, lasting 5–12 minutes, with preselected pressure of 30 mmHg that cannot be changed by the user.

The following diagram describes the progress of Pretreatment.

Sequence 1	Sequence 2	Sequence 3
		

Note:
Sequence 1 is carried out six (6) times. Sequence 2 and Sequence 3 are carried out only once.

Factory Default Program Settings

The Revive™ M4 Console is supplied with the following default program settings.

Program	Cycle Mode	Zone	Pre-treatment	Pressure [mmHg]	Time [min]	Hold [sec]	Release [sec]	Time On [min]	Time Off [min]	Total [hr]	User Modification
Recover	Sequential	–	–	50	30	5	10	–	–	–	Pressure, Time, Hold, Release, and Gradient (see note below)
Warm-up	Sequential	–	–	40	15	0	10	–	–	–	
Isolation	ISO	Distal	–	20	20	2	10	–	–	–	Zone Pressure, Time, Hold, Release, and Gradient (see note below)
Interval	Sequential	–	–	35	–	2	15	20	30	3	Pressure, Time On, Time Off, Total, Hold, Release, and Gradient (see note below)
Custom	Sequential	Distal (ISO only)	–	45	30	4	10	–	–	–	Cycle, Pressure, Time, Hold, Release, Pretreatment, and Gradient (see note below)

Note:

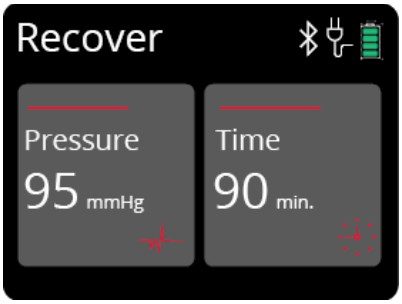
All programs - The user can change Pressure, Hold, and Release during treatment.

- Isolation - The user can select the zone to be inflated in the ISO cycle mode (Distal, Mid, or Proximal).
- Interval - The user can select the Time on, Time off and Total treatment time in addition to the Pressure, Hold, and Release.
- Custom - The user can select the Flow cycle and its Frequency.

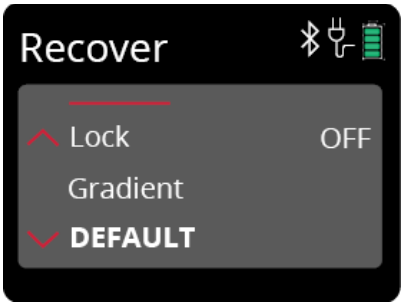
To return **all programs** to the default settings, press and hold both ⌃ and ⌄ until the buzzer beeps twice.

To return **each program** to the default settings:

a. Press ✓ repeatedly until the required program screen is displayed:



b. Press ✓ until the parameters screen is displayed.



c. Scroll down using ∨ until reaching **DEFAULT**.

d. Press ✓.

The buzzer beeps three times, and the selected-program parameters return to their default settings.

6. Components of the Revive™ M4 System

The Revive™ M4 737R Console

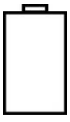
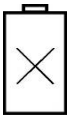
(See Figure 4)

The Console takes air from the room environment and sends it to the individual air chambers in the garment The Console then vents the air from the garments, there is a brief pause, and the treatment cycle repeats.

The Console is powered by either DC power adapter or by a rechargeable battery inside the Console. The battery can be charged while the Console is operated by electricity. The following table illustrates the battery power capacity displayed by the status indicators.

Note:

- Turn **On** the **Power Switch** to enable charging the Console.
- Turn **Off** the **Power Switch** to conserve battery power when not charging or not using the Console.

Battery Status Icon	Available Power
	75–100% power
	50–75% power remaining
	25–50% power remaining
	5%–25% power remaining
	Battery empty
	Battery disconnected

Prong Plug

(See Figure 5)

If you use only one garment, insert this plug into the unused air outlet on the front of the Revive™ M4 Console, to seal it off and prevent air from escaping (see Figure 21).

DC Power Adapter

(See Figure 6)

The DC Power Adapter receives 100–240 VAC, 50–60 Hz AC power and supplies 12 VDC 3A to the Console.

Caution:

- For indoor use only.
- Use only the provided DC power adapter.

Battery Pack

(See Figure 7)

- The Console can operate on battery power for up to eight (8) hours when fully charged.
- Battery may be charged during normal operation of the Console.
- Battery charging time is up to 8 hours.

Figure 4 - Revive™ M4 737R Console

Figure 5 - Prong Plug

Figure 6 - DC Power Adapter

Figure 7 - Battery Pack

Compression Garments

(See Figure 8 to Figure 13).

A variety of garments are available. Revive™ Full Leg Boot and Revive™ Calf Boot are available in several sizes. Revive™ Half Jacket, Revive™ Pants and Revive™ Core are adjustable.

Figure 8 – Revive™ Full Leg Boot

Figure 9 - Revive™ Arm Sleeve

Figure 11 – Revive™ Calf Boots

Figure 10 – Revive™ Core

Figure 12 – Revive™ Half Jacket

Figure 13 - Revive™ Pants

7. How to Operate the Revive™ M4 System

Following is a description of the Console operating panel and the various settings and displays (see Figure 14 and The Console Controls).

Read this section before operating the Console for the first time.

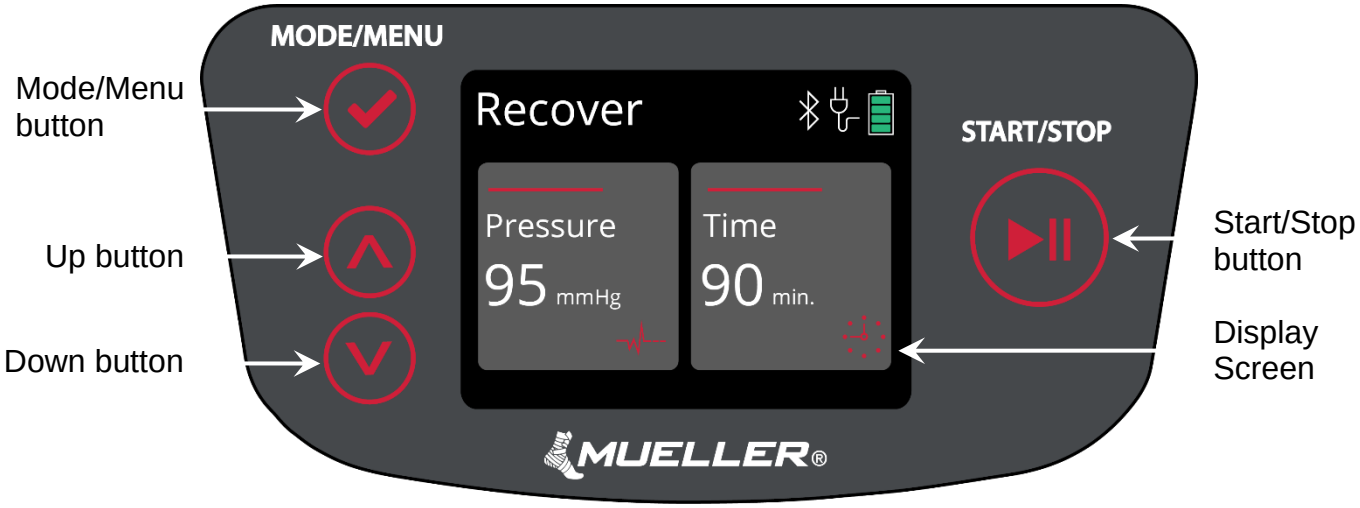


Figure 14 - The Console Operating Panel

The Console Controls

Control	Function
	Mode/Menu button: Used to access selection of a program, treatment pressure, treatment time, cycle mode, release time, and hold time.
	Up and **Down** buttons: Used to select a program, treatment pressure, treatment time, cycle mode, release time, and hold time.
	Start/Stop button: Used to start or stop treatment.
	Power Switch: Used to power-up the Console (located at the back of the Console at the bottom right side).
	DC Adapter Socket: Used for connecting DC Adapter (located under the Power Switch).

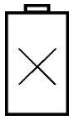
The Console Display Screen

Home Screen

Displayed Screen	Function
	Displays pressure setting at the most distal pressure zone. • Pressure may be increased or decreased from this home screen (see instructions below). • Displays treatment time setting, which decreases during treatment.

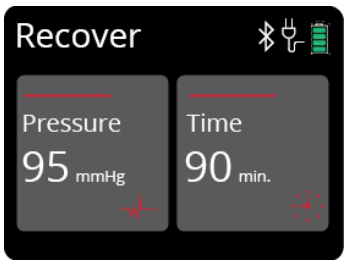
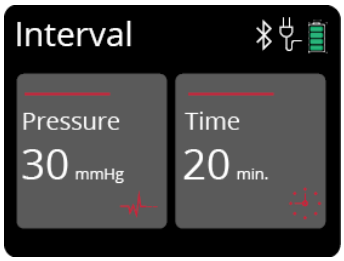
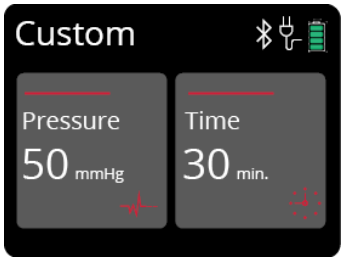
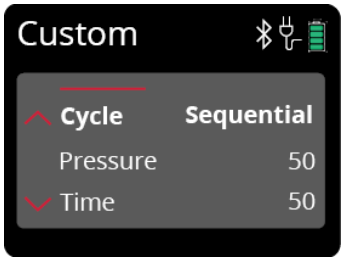
Display Screen Icons

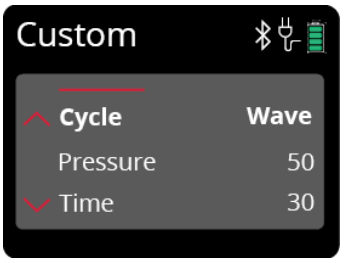
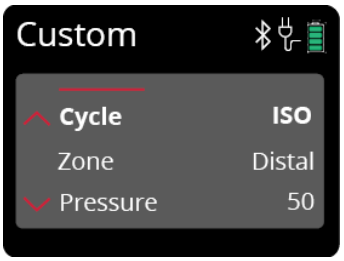
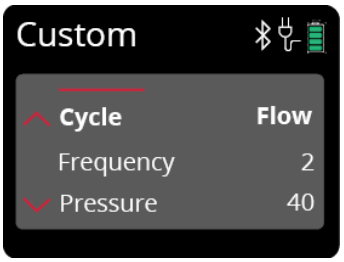
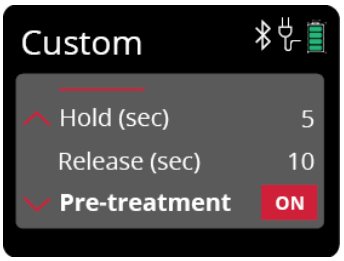
The following icons are displayed at the top of the screen.

Displayed Icon	Function
	General Warning (displayed only when the Console detects an error or internal problem)
	Air Leak (displayed only when the Console detects an air leak)
	DC power adapter connected to 100–240 Volt wall outlet (displayed when the Console is operated by electricity)
	Battery Status (displays the level of battery power)
	**Battery disconnected**
	Treatment in progress
	Displayed only during Time Off between treatment periods in Program 4
	Disabling Console settings
	Bluetooth connected from smartphone (Console selected by Mobile App)
	Bluetooth connection between Console and smartphone approved **Note**: When neither Bluetooth icon is displayed, a Bluetooth error occurred.

Program and Cycle Mode Display Screens

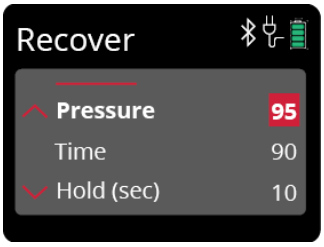
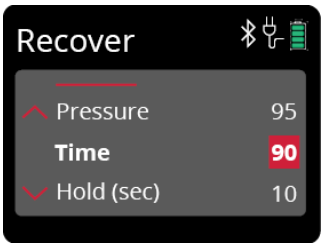
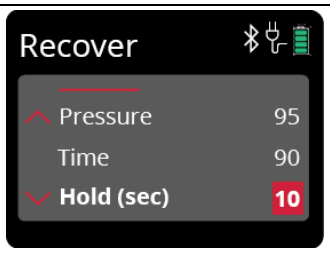
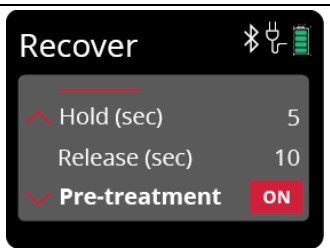
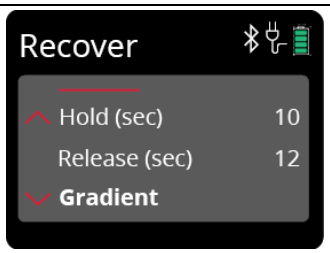
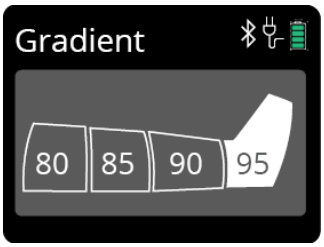
The following programs and cycle modes are displayed on the screen.

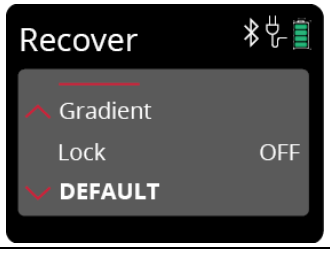
Displayed Program/Cycle Mode	Function
	Recover
	Warm-Up
	Isolation
	Interval
	Custom
	• Sequential cycle mode selected

Displayed Program/Cycle Mode	Function
	• Wave cycle mode selected
	• ISO cycle mode selected
	• Flow cycle Mode selected
	• Pretreatment selected

Treatment Parameters Screens

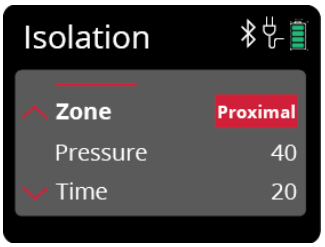
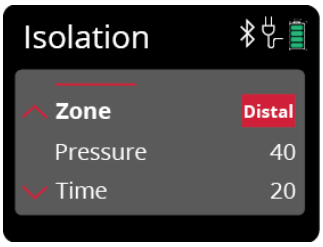
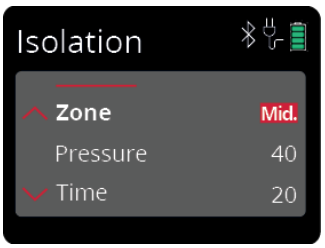
The following treatment parameters (except **Time**) are displayed for all programs.

Displayed Screen	Function
	Displayed screen during **Pressure** setting
	Displayed screen during **Time** setting (not displayed in Interval)
	Displayed screen during **Hold** setting
	Displayed screen during **Release** setting
	Displayed screen during **Pretreatment** setting
	Displayed screen during **Lock** setting
	Displayed screen during **Gradient** setting

Displayed Screen	Function
	Displayed screen during reverting to **Default** setting

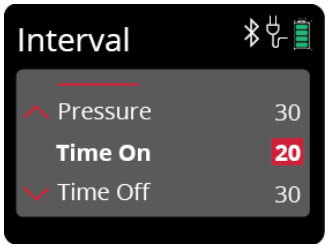
Isolation Program Zone Selection Screens

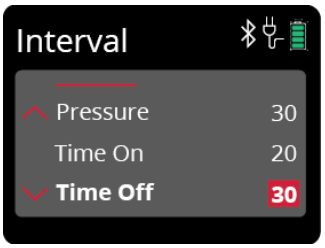
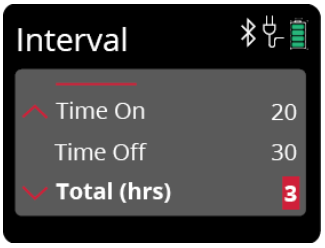
The following zone selection screens are displayed for Isolation

Displayed Screen	Function
	Displayed screen during **Proximal** setting
	Displayed screen during **Distal** setting
	Displayed screen during **Mid.** setting

Interval Program Time On, Time Off, and Total Screens

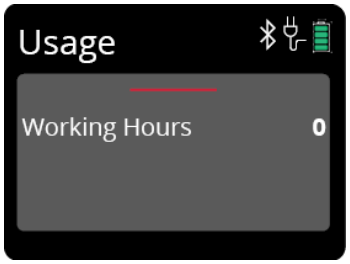
The following parameters are displayed for Interval

Displayed Screen	Function
	Displayed screen during **Time On** setting

Displayed Screen	Function
	Displayed screen during **Time Off** setting
	Displayed screen during **Total** setting

Reading Console Usage Data

To display the accumulated hours the Console has operated, press and hold ✓ and ∨ for a few seconds until the **Usage** screen appears.



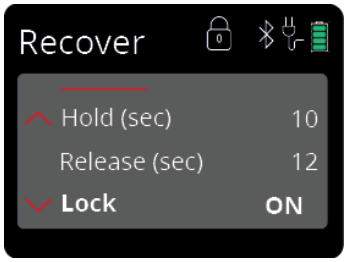
The Console displays the number of hours the Console has operated.

The buzzer beeps once and returns to the **Home** screen after a few seconds.

Disabling Console Settings

To disable Console settings, press and hold ✓ and ∧ for 3 seconds.

The buzzer beeps once and the padlock icon appears at the top.



When the settings are disabled, the user cannot change any treatment parameter.

During treatment, the user can change only the treatment pressure. All other treatment parameters cannot be modified.

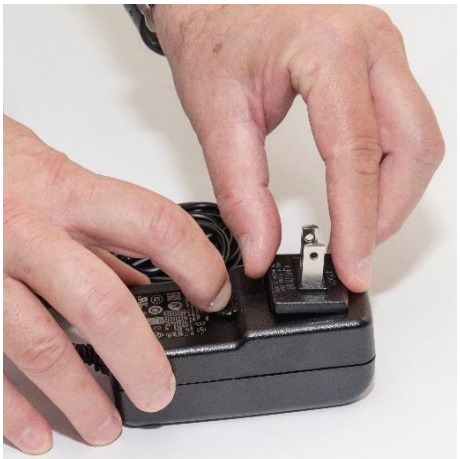
Step 1: Set up the Revive™ M4 Console

Caution:

When the system has been stored in extreme temperature conditions of -20°C (-4°F) or 70°C (158°F) between uses, wait for two (2) hours before using the system.

a. Place the Console on a flat, stable surface from where it will not slip or fall.
   Make sure the front of the Console is at least six inches from the edge of the surface.
b. Position the Console so that you can easily reach the controls during treatment.
c. Select the plug suitable for your country and insert it onto the pins on the DC adapter backside (see figure below).

To replace the plug, press and hold the **Open** button under the plug while pulling out the plug (see figures below).



d. Insert the DC power adapter cable into the DC adapter socket on the Console, and then insert the DC adapter into an appropriate 100-240 Volt wall outlet.

Note:

The Console is "multi-voltage" and can be used for travel.

An appropriate socket adapter must be used in countries with incompatible wall outlets.

Step 2: Prepare for Treatment

- Always wear light clothing underneath the garment, for hygienic reasons, to avoid irritation and to absorb perspiration.
- Do not wear the garment directly over bare skin.
- Clothing should be unrestrictive and absorbent, and free of zippers, buttons or other items that could rub and chafe under the treatment.
- We recommend wearing cotton clothes, such as sweatpants or leggings along with cotton socks underneath Revive™ Full Leg Boot, Revive™ Calf Boot, Revive™ Core and Revive™ Pants, and a long sleeve T-shirt under Revive™ Arm Sleeve and Revive™ Half Jacket.
- Remove any jewelry, wristwatches, etc. that would be covered by the garment.

Step 3: Put on the Garment

Caution:

- Do not inflate the garment without wearing it over the intended body area ("on empty") or with open zippers. Doing so can damage the garment.
- Do not apply excessive force to the garment straps. Do not use the straps for any purpose other than intended by the manufacturer.
  Use of excessive force and/or misuse shall void the manufacturer's warranty.

Revive™ Full Leg Boot and Revive™ Calf Boot

a. Zip the garment closed at least part of the way up before inserting your leg.

b. Insert your foot into the garment (see Figure 15). Pull the top of the garment towards your torso, extending the garment to its maximum length.

c. Close the zipper all the way up.

d. Repeat for other leg, if desired.

Revive™ Full Leg Boot and Revive™ Calf Boot are designed to fit on either the right or left leg.

Caution:

- Do not stand or walk while wearing the garment!
- Put on the garment while in a seated position and remove it before rising from the treatment position.

Figure 15 - Putting on Revive™ Full Leg Boot or Revive™ Calf Boot

Revive™ Arm Sleeve

a. Insert the arm into the garment.

b. Pull the garment over the shoulder to cover it.

c. Wrap the fastening strap around the body, under the untreated arm. Fasten the strap and adjust the buckle for a comfortable fit.

Revive™ Arm Sleeve is designed to fit on either the right or the left arm.

Caution:

Do not stand or walk while wearing the garment!

Put on the garment while in a seated position and remove it before rising from the treatment position.

Revive™ Half Jacket

Use Revive™ Half Jacket lying down or in a seated position.

Revive™ Half Jacket treats the arm, shoulder, back, chest, and abdomen.

The arm can be treated held straight out to the side (90 degrees), down in a natural position, or held supported using the optional strap.

a. Place the Console where you can reach it easily during treatment.

b. Attach the garment hose bundle to one of the air outlets on the Console and cap the other air outlet with the plug provided with the Console.

c. Lay the garment on a flat surface. Select the correct side fastener: RIGHT for treating the right arm and LEFT for treating the left arm. Zip the fastener to the vest, with the gray inner lining facing up (see Figure 16).

Figure 16 - Assembling the Revive™ Half Jacket

d. Open the zipper at the wrist of the Arm Sleeve. This allows using both hands to put on the jacket.

e. Loosen the side straps on the fastener to near their full length. This allows grasping them after you put on the garment.

f. Put on the garment, as you would a jacket. Make sure the armpit chamber is tucked into the Arm Sleeve.

g. Pull the side fastener around your torso and lightly fasten the hook-and-loop tabs at the top and bottom. This allows letting go of the garment and grasping the side fastener.

h. Find the zipper of the side fastener (attached to the straps), and zip the garment closed around your torso. Zip the wrist zipper closed.

i. Tighten the straps at the side for a comfortable fit.
If you experience discomfort during treatment, adjust the buckles at the side to loosen the garment.

Using the Optional Arm Support Strap

a. Before turning on the Console power switch, fasten the strap to the torso. Extend the strap to its full length by pulling up on the buckle (see Figure 17). Fasten the strap to the Arm Sleeve.

Figure 17 - Extending the Optional Arm Strap

b. Hold the arm in a comfortable position (not bent). To allow the garment to fill with air, operate the Console for one inflation cycle.

c. When the Console deflates, bend your arm to the desired position.

d. Adjust the strap to the desired tension by pulling on it with your free hand.

Caution:

- Stop treatment and consult your medical practitioner if there is onset of pain, bruising or irritation during or after treatment.
- Do not use pressure over 50 mmHg with the Revive™ Half Jacket. Using Revive™ Half Jacket at pressure above 50 mmHg may cause discomfort and may reduce treatment effect.
- Do not use Revive™ Half Jacket during pregnancy.
- Do not stand or walk while wearing the garment!
Put on the garment while in a seated position and remove it before rising from the treatment position.

Revive™ Impact Pants

a. Use Revive™ Impact Pants in a supine position (lying face up on a bed or couch).

b. Wear clean cotton socks and light cotton unrestrictive pants (such as sweatpants) under Revive™ Impact Pants to absorb perspiration, prevent irritation, and keep Revive™ Impact Pants clean. Stockinette may also be used. Clothing worn underneath Revive™ Impact Pants should be free of buttons, zippers and decorations that may rub against the skin.

c. Lay Revive™ Impact Pants flat, with logo side up.

d. Open the zippers on both sides halfway. Put on the pants and close the zippers all the way to the top. Revive™ Impact Pants should not fit tightly at any point. Expander inserts are available to increase circumference.

Using the Hook-and-Loop Fasteners

You can use the hook-and-loop fasteners to form customized "boot" for your foot (see Figure 18 and Figure 19).

a. Lay the pants flat on a bed or couch, and then open the hook-and-loop fasteners (see Figure 18).

b. To initially adjust the boot angle, bend the boot at the heel, and then fasten the lower hook-and-loop fasteners to the upper hook-and-loop fasteners (see Figure 18 and Figure 19).

Note:

When further adjustment is needed:

- If a caregiver assists, he/she can readjust the boot angle using the hook-and-loop fasteners.
- If you are on your own, pause the treatment, allow the pants to deflate, and then readjust the boot angle using the hook-and-loop fasteners.

c. After use, leave the hook-and-loop fasteners attached for the next treatment.

Caution:

- Do not use pressure over 40 mmHg over the abdominal area. See your system user manual for pressure setting instructions.
- Do not use Revive™ Impact Pants if you are pregnant.
- Do not use while standing or sitting. Use in a reclined or supine (lying face up) position.
- Do not use the hook-and-loop fasteners or other features other than described above. Excessive force and misuse shall void the manufacturer's warranty.

Figure 18 - Revive™ Impact Pants

Figure 19 - Forming Customized "Boot"

Revive™ Core

This garment massages the core areas (hips, buttocks, lower back).

Use Revive™ Core in a reclined or supine position (lying face up). Pillows may be used under the knees and/or ankles for comfort.

a. Put on the ReviveTM Core garment while you are in a seated, half seated, or lying position on a bed, wide couch, or in a recliner chair.

b. The Revive™ Core garment has three zipper fasteners on each side. Fasten the garment on each side using the zipper that provides you with a comfortable fit. The garment should not fit tightly.

c. If the garment is too small, zip in an expander between the zippers on each side of the Revive™ Core garment.

   Note that the expanders are “sided” left and right – the right side will only fit into the right leg, and the left side only into the left leg.

d. Ensure the zippers on the Revive™ Core are closed completely before turning on the Revive™ Core console.

e. If you wish to increase contact of the massage chambers with your upper gluteal/lower back area, use the shoulder straps. Pass the shoulder straps over your shoulders and fasten them in the front.

f. Select a massage pressure of up to 50 mmHg for use with the Revive™ Core garment.

Caution:

- Do not use pressure over 50 mmHg with the Revive™ Core garment.
- Do not use the Revive™ Core garment during pregnancy.
- Revive™ Core is not intended for use in a standing position. Use it in a reclined or supine (lying face up) position.
- Do not stand or walk while wearing the garment! Put on the garment while in a seated position and remove it before rising from the treatment position.

All Garments

The garment should not fit too tightly; you should be able to insert three fingers into the garment when it is zipped closed before inflation.

If the garment is too tight, you need a larger size. Contact Mueller Sports Medicine, Inc..

Make sure the garment is zipped completely closed before turning ***On*** the Revive™ M4 Console, and leave it closed for the duration of the treatment.

At the end of treatment, the garment deflates within a short time, allowing it to be removed easily. You should be able to slip the garment off and pull it on again for each use without completely unzipping the garment.

Note:

Use only REVIVE™ garments with the Revive™ M4 Console.

Step 4: Connect the Garment Hose Bundle to the Console

Note:
Hold the Console handle with one hand while connecting or disconnecting the hose bundle with your other hand.

a. Securely insert the garment hose bundle connectors, with the logo facing up, into the air sockets on the Console (see Figure 20).

b. Make sure the air hoses are not bent, kinked, or pinched.

Figure 20 - Connecting the Garment Hose Bundle to the Console

Note:
When only one Revive™ Arm Sleeve, Revive™ Full Leg Boot, Revive™ Calf Boot, or Revive™ Half Jacket is used, plug the second outlet using the Prong Plug (see Figure 21) to prevent air from escaping. Otherwise, the Console stops working and the buzzer beeps.

Figure 21 - Inserting the Prong Plug to Block the Unused Air Outlet for Single Garment Use

Step 5: Select the Treatment Program

a. Turn **On** the **Power Switch**.

The following screen is displayed, showing the console name and model, and the Firmware version.

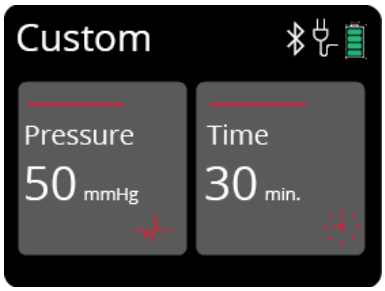
After two seconds, the **Home** screen is displayed, showing the last selected program and its pressure and time settings.

b. To select the required program, press ✓.

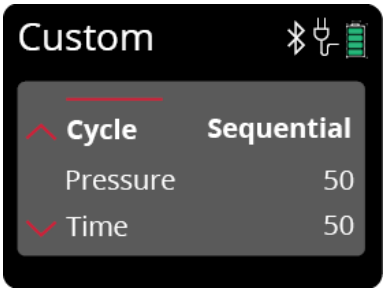
If you selected the Recover or Warm-Up program in Step 5, proceed to Step 9: Set Treatment Pressure.

Step 6: Set Cycle Mode (Custom Program only)

a. Press ✓ repeatedly until the following screen is displayed:



b. Press and hold ✓ until the following screen is displayed:

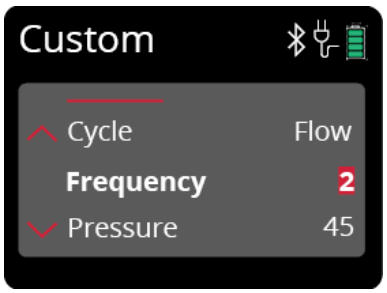


c. Press ✓. The highlighted cycle blinks.

d. To select **Sequential**, **ISO**, **Wave**, or **Flow**, press ∧ or ∨.

- If you selected **Sequential, ISO,** or **Wave** in Step d, proceed to Step e.
- If you selected **Flow** in Step d, proceed as follows:

1. Press ∨ to select **Frequency**.



   The previously selected **Frequency** value is highlighted.

2. Press ✓ to enable selection of the **Frequency** value.
   The highlighted **Frequency** value blinks.
3. Press ∧ or ∨ to select the **Frequency** value.
   You can select Frequency from 1 to 8.
4. Press ✓ to confirm selection.
   The selected Frequency value stops blinking.
5. To return to the program screen, press ▶II.

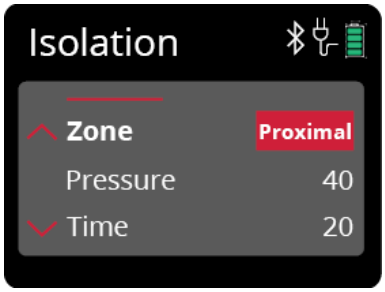
e. To confirm selection, press ✓.

f. Proceed to Step 7: Set Zone.

Step 7: Set Zone (Custom Program - ISO Cycle and Isolation Program only)

a. Press ✓ repeatedly until the following screen is displayed:

b. Press and hold ✓ until the following screen is displayed:

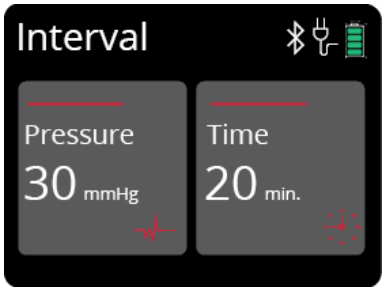


c. Press ✓. The highlighted zone blinks.
d. To select **Proximal**, **Mid**, or **Distal**, press ∧ or ∨.
e. To confirm selection, press ✓.

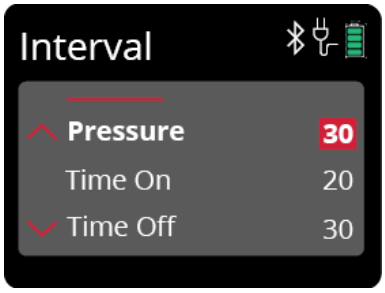
Proceed to Step 9: Set Treatment Pressure.

Step 8: Set Time On, Time Off, and Total (Interval Program only)

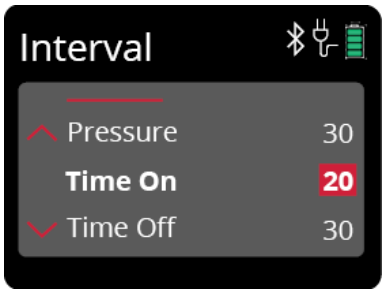
a. Press ✓ repeatedly until the following screen is displayed:



b. Press and hold ✓ until the following screen is displayed:



c. Press ∨. The **Time On** value is highlighted:



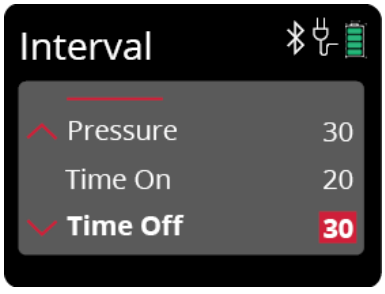
d. Press ✓. The highlighted **Time On** value blinks.

e. To select **Time On**, press ∧ or ∨.

Note:
Time On is the duration of treatment between recurrent pauses (Time Off). Time On can be set between 10–90 minutes in 5-minute increments.

f. To confirm selection, press ✓.

g. Press ∨. The **Time Off** value is highlighted:



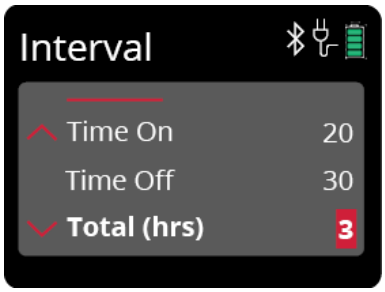
h. Press ✓. The highlighted **Time Off** value blinks.

i. To select **Time Off**, press ∧ or ∨.

Note:
Time Off is the duration of pause between recurrent treatments (Time On).
Time Off can be set between 10–90 minutes in 5-minute increments.

j. To confirm selection, press ✓.

k. Press ∨. The **Total (hours)** value is highlighted:



l. Press ✓. The highlighted **Total** value blinks.

m. To select **Total**, press ∧ or ∨.

Note:
Total is the overall time of the interval program that includes recurrent treatments (Time On) and pauses (Time Off).
Total can be set between 1–8 hours in 1-hour increments.

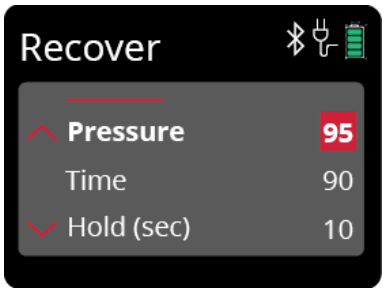
n. To confirm selection, press ✓.

o. Proceed to Step 9: Set Treatment Pressure.

Step 9: Set Treatment Pressure

a. Press ✓ repeatedly until the required program screen is displayed:

b. Press and hold ✓ until the following screen is displayed:



c. Press ✓. The highlighted **Pressure** value blinks.

d. To select **Pressure**, press ∧ or ∨.

e. To confirm selection, press ✓.

The selected pressure is the pressure of the first zone (the most distal zone).

Note:
The minimum pressure setting is 20 mmHg.
The maximum pressure setting is 100 mmHg.
Pressure can be set in 5-mmHg increments.

Guidelines for Selecting Pressure

Changing the pressure level alters the treatment intensity by increasing the amount of air inflating each air chamber.

Lower pressure setting applies lighter treatment, and higher-pressure setting applies more intense treatment (see Table 1 as a guide for pressure selection).

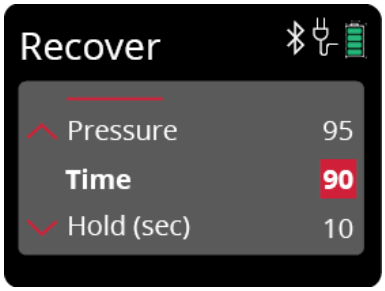
If the treatment is too intense, decrease the pressure.

Table 1 - Pressure Selection for Revive™ Arm Sleeve, Revive™ Full Leg Boot, and Revive™ Calf Boot

Treatment Intensity	Pressure Setting (mmHg)
Light	20–30
Medium	40–60
Intense	70–100

Step 10: Set Treatment Time

a. Press (V).
The following screen is displayed.



b. Press (✓). The highlighted **Time** value blinks.

c. To select **Time**, press (^) or (V).

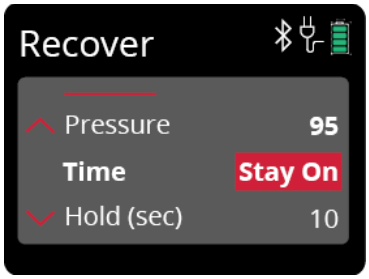
d. To confirm selection, press (✓).

Note:
The minimum time setting is 10 minutes.
The maximum time setting is 90 minutes.
When setting time to continuous treatment, **Stay On** is displayed.

Set Continuous Treatment Time

Continuous treatment time allows massaging until stopped by the user.

a. To set time to continuous treatment, press (^) when **90** is displayed.
The following screen is displayed with **Stay On** blinking.



b. To confirm selection, press (✓).

c. Press and hold (✓) until the program screen with **Stay On** selected is displayed:

Upon pressing (▶II), treatment continues until pressing (▶II) to stop the treatment.

Step 11: Set Hold Time

Considerations for Choosing Hold Time

The Hold time changes the time in which air pressure is maintained in the garment(s) at the end of the treatment cycle before deflation.

If you like the sensation of a longer hold at the top of the garment, you may increase the Hold time. If you want a more rapid treatment pace, you may decrease the Hold time.

Note:

Hold time is the duration of maintaining air pressure in the garment at the end of the treatment cycle before deflation.

Hold time can be set between 0–10 seconds.

When using the Wave cycle mode, it is recommended to set minimal Hold time.

a. Press ✓.
   The following screen is displayed.

b. Press ✓. The highlighted **Hold** value blinks.
c. To select **Hold**, press ∧ or ∨.
d. To confirm selection, press ✓.

Step 12: Set Release Time

a. Press (V).
The following screen is displayed.

b. Press (✓). The highlighted **Release** value blinks.

c. To select **Release**, press (^) or (V).

d. To confirm selection, press (✓).

Note:
Release time is the duration between treatment cycles and can be set between 10–70 seconds.
When using the Wave cycle mode, it is recommended to set minimal Release time.

Considerations for Choosing Release Time

Changing the Release time adjusts the length of the time the garments are deflated in between each treatment wave. If you would like a more rapid treatment pace, select a shorter Release interval. If you want to slow down the treatment pace, select a longer Release interval (see Table 2).

Table 2 - Guideline for Release Time Selection

Release Duration	Release Time (seconds)
Short Release interval	10–20
Medium Release interval	20–40
Long Release interval	40–70

If you experience tingling or numbness during the treatment anywhere in the treated area, increase the Release time to 30 seconds, 45 seconds, or more. If this sensation persists after increasing the Release time, reduce the pressure. If this sensation continues, stop using the system immediately and consult your physician.

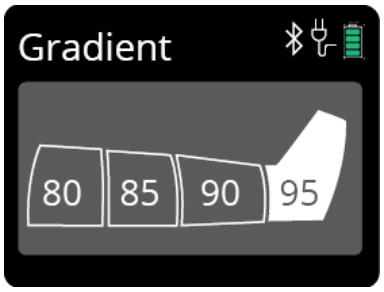
When using two large garments, longer Release time may be necessary to ensure that the entire air is deflated from the garments between treatment cycles. The Console does not inflate garments when air from the previous cycle has not been adequately deflated.

If the Release time you selected is too short for adequate deflation, the Console automatically increases the Release time. If this is bothersome, increase the Release time slightly and try again.

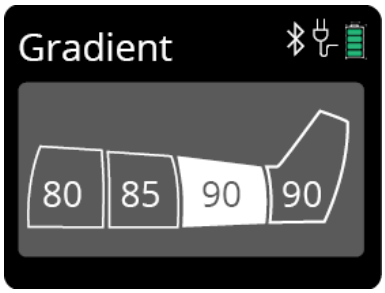
Step 13: Set Gradient

a. Press (v).
   The following screen is displayed.

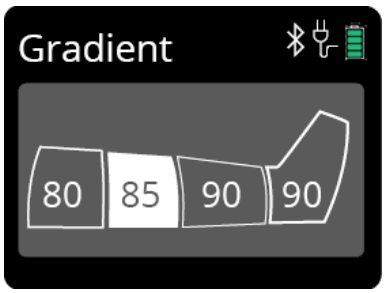
b. Press (✓). The following screen is displayed:



c. Press (✓). The highlighted zone blinks.
d. To select the zone pressure, press (^) or (v).
e. To confirm selection, press (✓).
f. To proceed to the next zone, press (^). the following screen is displayed:



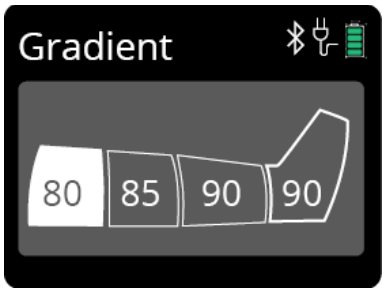
g. Press (✓). The highlighted zone blinks.
h. To select the zone pressure, press (^) or (v).
i. To confirm selection, press (✓).
j. To proceed to the next zone, press (^). the following screen is displayed:



k. Press (✓). The highlighted zone blinks.
l. To select the zone pressure, press (^) or (v).

m. To confirm selection, press ✓.

n. To proceed to the next zone, press ∧. the following screen is displayed:



o. Press ✓. The highlighted zone blinks.

p. To select the zone pressure, press ∧ or ∨.

q. To confirm selection, press ✓.

Note:

The Console disables setting higher proximal pressure than distal pressure.

This prevents setting "reverse gradient" which can impede lymphatic or venous flow. Decreasing distal pressure lowers pressure in the more proximal zones. To increase proximal pressures, you may need to increase the pressure in the more distal zones first.

Step 14: Start the Treatment

Now you are ready to operate the Console and begin your treatment.

Note:
Hold the Console handle with one hand while turning **On/Off** the **Power Switch** with your other hand.

a. Ensure that the hose bundle is securely attached to the Console.
b. Verify that the **Power Switch** at the back of the Console is in the **Off** position.
c. Connect the DC power adapter cable to the DC adapter socket (located under the power switch).
d. Insert the DC power adapter into an appropriate 100–240 Volt wall outlet.
e. Get into a comfortable seated, reclining, or lying position from where you can easily reach the Console controls.
f. Put on the garment, following the directions in Step 3: Put on the Garment.
g. Turn **On** the **Power Switch**.
h. Press ⏯.

   Treatment begins.

Note:
At the start of treatment, the garment may take several inflation cycles to fill completely, as the garment is filled from a completely empty state.

i. Wait for a few cycles to become accustomed to the treatment sensations. Note that the first inflation cycle may take a longer time to fill, especially if you are using two garments.

Using Revive™ M4 as a relaxing, invigorating treatment before you exercise increases circulation and can help to get you into the workout more quickly. Suggested treatment time is 15–30 minutes before your workout.

Alternatively use Revive™ M4 for a relaxing treatment at the end of the day, or after exercise to relax and soothe tired aching muscles.

Generally, we recommend using Revive™ M4 30–45 minutes after workout or in the evening after finishing your daily activities.

Caution:
The treatment sensation should be pleasant and comfortable.

If you experience pain or discomfort during or after the treatment or if there is onset of bruising or irritation during or after the treatment, discontinue use and consult your physician.

Step 15: End the Treatment

a. When the treatment time is complete, the treatment cycle stops.

   If you need to stop the treatment in the middle, press .

b. At the end of the treatment, turn **Off** the **Power Switch**.

c. When the treatment stops, wait up to 30 seconds to allow the garment to deflate before you remove it.

Note:
When immediate garment deflation is necessary, disconnect the garment hose bundle from the Console to immediately deflate the air pressure in the garment.

8. Using the REVIVE™ Mobile Application

The REVIVE™ Mobile Application allows:

- Modifying treatment parameters:
  - ♦ Cycle mode
  - ♦ Treatment time
  - ♦ Treatment pressure
  - ♦ Hold time
  - ♦ Release time
  - ♦ Zone pressures
- Retrieving operational log (usage history) from the Console
- Starting or stopping the console using your smartphone

Notes:

The REVIVE™ Mobile Application can be used for configuring the Revive™ M4 Console only if installed with integrated Bluetooth module.

Note that RF emitters present in proximity to the Console may disturb the communication between the Console and the mobile phone.

When using the REVIVE™ Mobile Application to configure and monitor the Console, make sure to remain within reach of the Console, allowing you to turn off the power switch or change settings without using the mobile application.

The Console is fully functional without using the REVIVE™ Mobile Application.

In case of communication failures between the mobile application and the Revive™ M4 Console, see chapter 11 - Troubleshooting Wireless Connection Problems.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential 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.

The REVIVE™ Mobile Application should be installed on mobile phone equipped with security measures recommended by the phone provider or by the phone operating system provider (measures such as antivirus or malware protection software).

Step 1: Download and Install the REVIVE™ Mobile Application

The REVIVE™ Mobile Application can be used after installing from either Google Play or App Store.

- GET IT ON Google Play - https://play.google.com/store/apps/
- Download on the App Store - https://www.apple.com/itunes/

Internet access is required for installing the REVIVE™ Mobile Application.

The last version of the application must be downloaded.

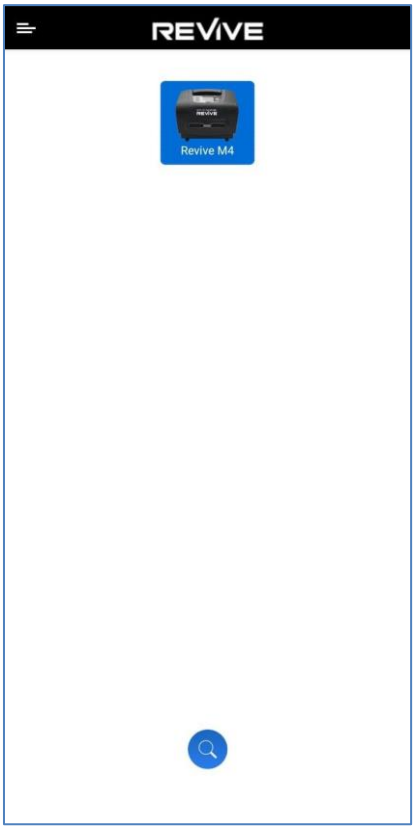
Step 2: Connect to a Revive™ M4 Console

a. Turn **On** the **Power Switch**.

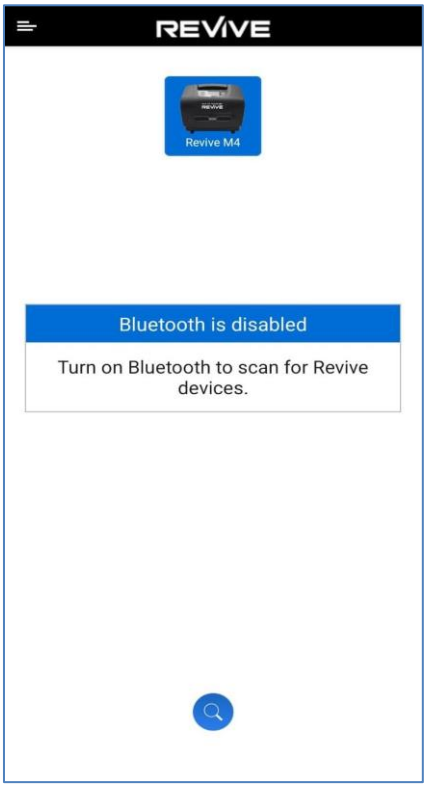
b. To open the application, tap icon on your smartphone screen.

The Splash screen is displayed for 3 seconds.

Followed by the console selection menu. Select the Revive™ M4 console.



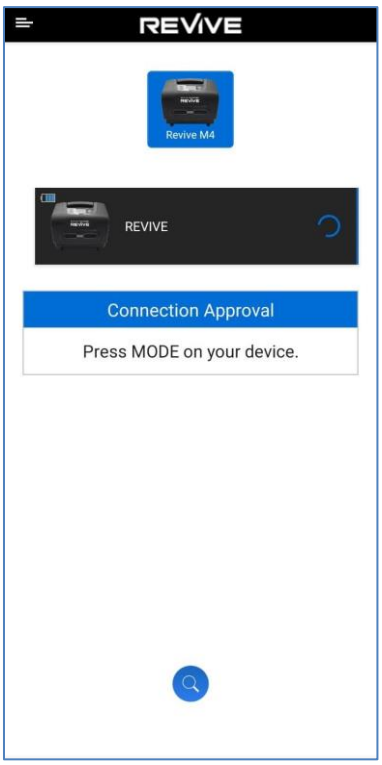
The Bluetooth turn-on message follows.



c. Turn On Bluetooth on your smartphone.

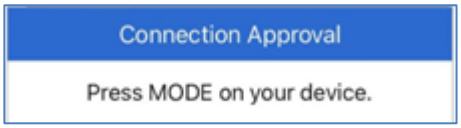
d. To search your console, tap

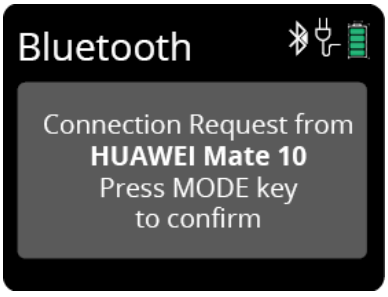
The Search screen is displayed.



e. To select your console, tap the Console on the Search screen.

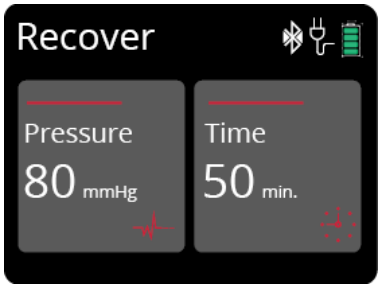
The Connection Approval message is displayed on the Search screen and the Connection Request message is displayed on the Console screen:





To approve connection, press ✓ on the Console.

The following screen opens on the Console, with the Bluetooth icon indicating connection between the App and the Console.



The Connection Approval message disappears from the Search screen.

The Main Screen opens (see Main Screen).

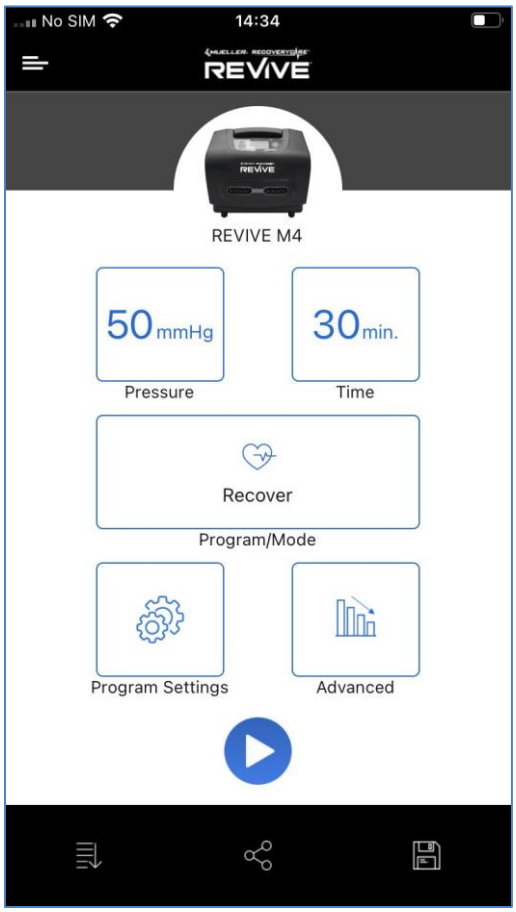
Main Screen

Following is a description of the Main Screen, which includes all operations of the Mobile App.

Read this section before operating the Mobile App for the first time.

The Main Screen includes the following operations:

- Menu
- Setting Pressure
- Setting Time
- Selecting Program
- Program Settings
- Advanced Settings (Gradient, and Lock Interface)
- Loading a Treatment Program
- Sharing a Treatment Program
- Saving a Treatment Program created from current settings



Main Screen

Main Screen Buttons

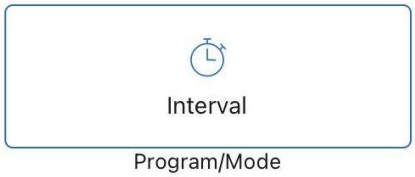
Control	Function
	Menu button
	Time button: Used for selecting treatment time
	Pressure button: Used for selecting treatment pressure

Program/Mode button(s): opens a scrolling list for selecting Program

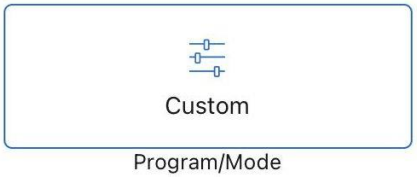
- Recover

- Warm-up

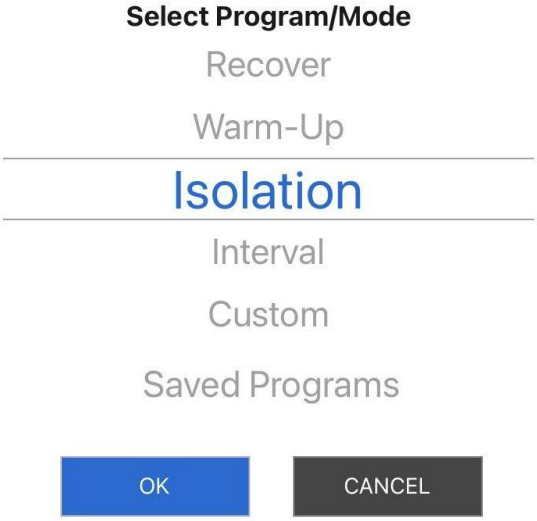
- Isolation

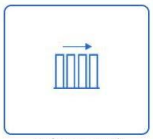


- Interval



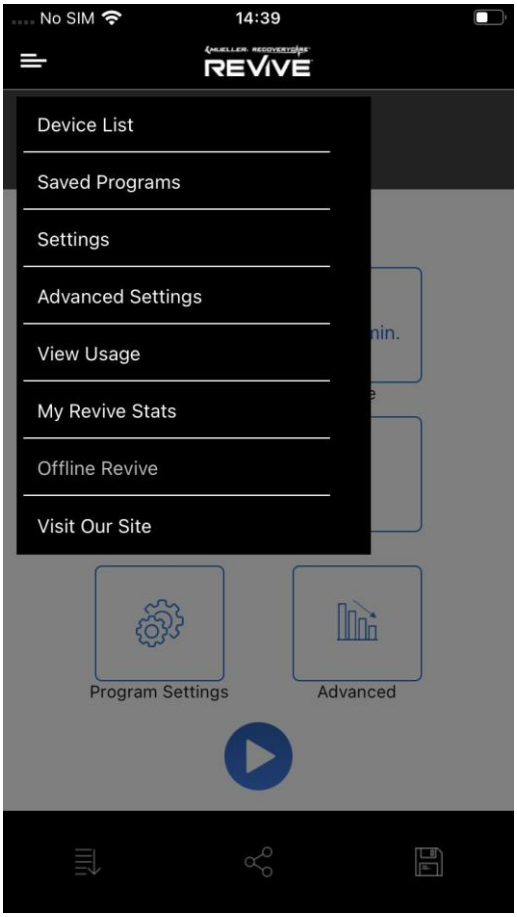
- Custom



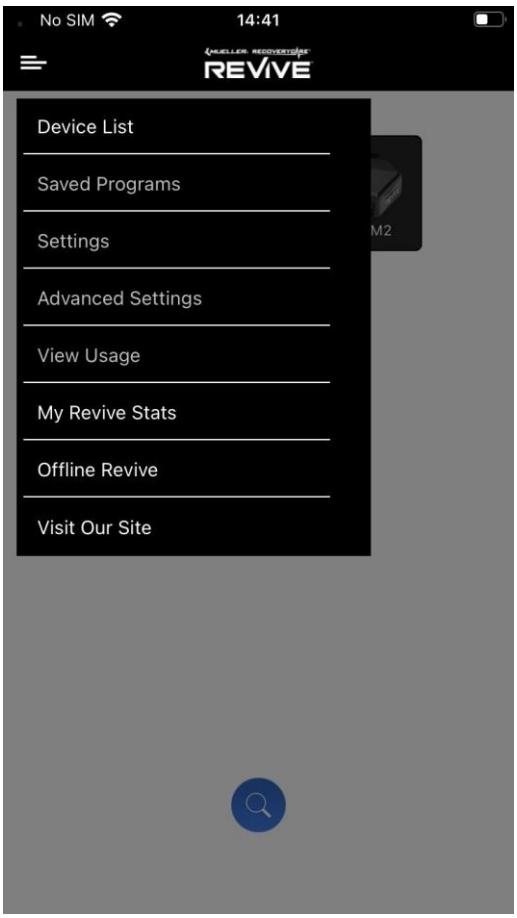
Control	Function
	Advanced buttons used for selecting: Advanced settings with gradient pressures or Advanced settings without gradient pressures
	
	Play button used for: • Updating setting in Console • Starting treatment
	Load button: Used for loading a treatment program
	Share button: Used for sharing a treatment program
	Save button: Used for saving a treatment program created from current settings

Menu

To open the menu, tap or swipe right the Main Screen.
The menu opens:



Online Mode Menu



Offline Mode Menu

The **View Usage**, and are available only in Online mode (i.e., only when the Mobile App is connected to an Revive™ M4 Console).

Menu Options:

- **Device List** - Return to Console selection screen e.g., connect to a different console
- **Saved Programs**
- **Settings**
- **Advanced Settings**
- **View Usage** - Read treatment log from Console
- **My Revive Stats** - View usage statistics

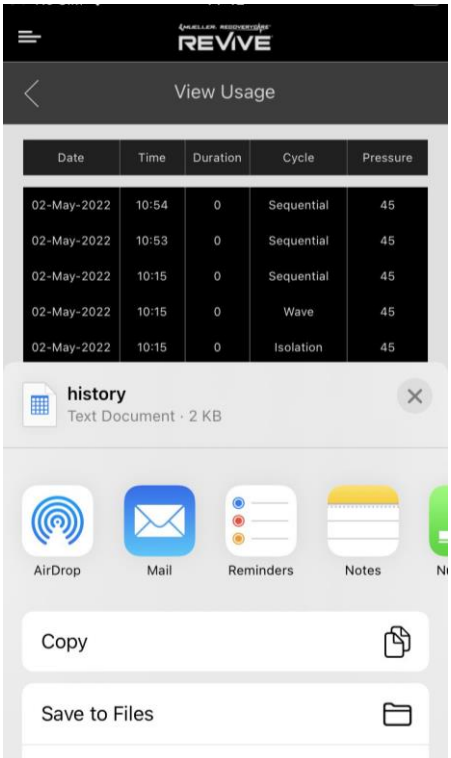
a. Tap **View Usage**.

The **Usage History** screen opens:

You can share the Usage History log as follows:

b. Tap .

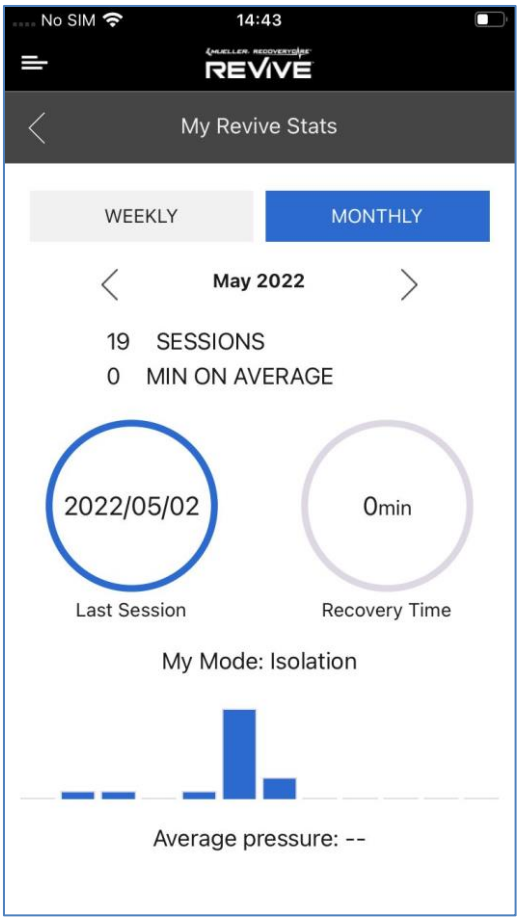
A standard Share-via-Application screen opens (different depending on consoles and operating systems).



c. Select the application used for sharing (e.g., Outlook, Gmail, WhatsApp, etc.).

Tap **My Revive Stats**.

The **My Revive Stats** screen opens:

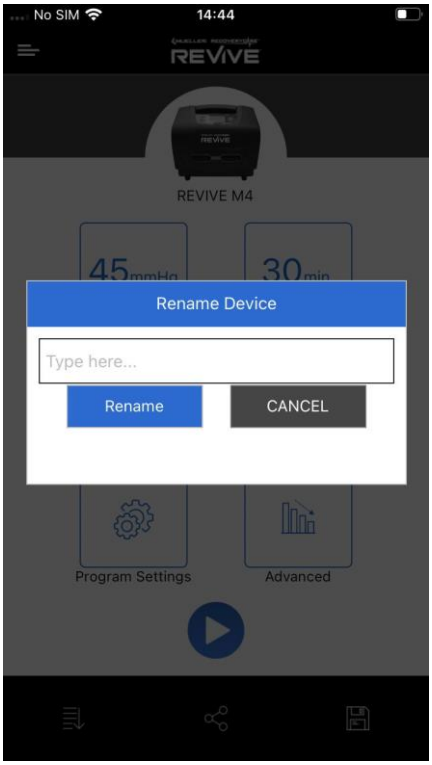


You can view the usage statistics.

- **Offline Revive** - Opens Main Screen for unconnected Revive™ M4 Console
- **About** - Opens the About REVIVE™ page on the Mueller Sports Medicine, Inc. website
- **Visit our Site** - Opens the Mueller Sports Medicine, Inc. website
- **Help** - Opens the Mueller Sports Medicine, Inc. website Help page

Naming your Console

a. Tap and hold the console icon on the **Main Screen** for about 2 seconds, until the **Rename Device** dialog box with virtual keyboard opens.

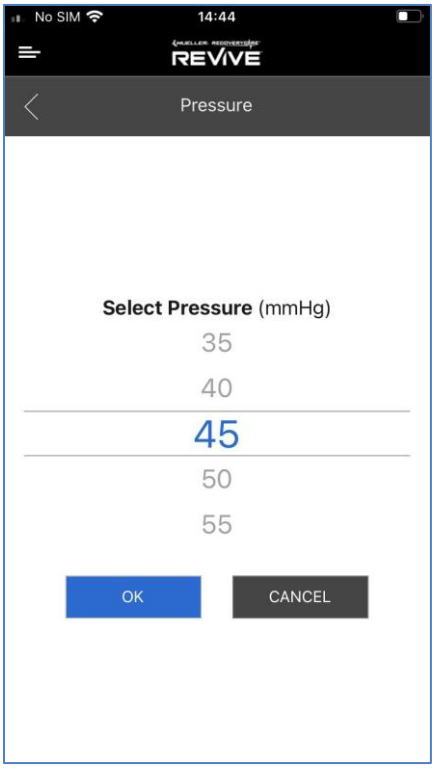


b. Tap the new name using the virtual keyboard.

c. To approve the new name, tap **Rename** or tap **CANCEL** to cancel and return to the Main Screen.

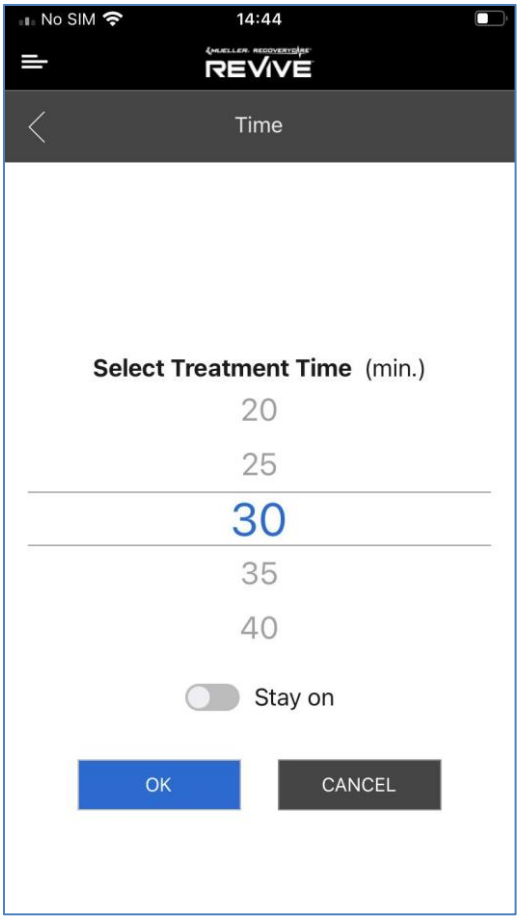
Setting Treatment Parameters

- Selecting treatment pressure
  a. Tap the **Pressure** button.
     The **Select Pressure** screen opens:



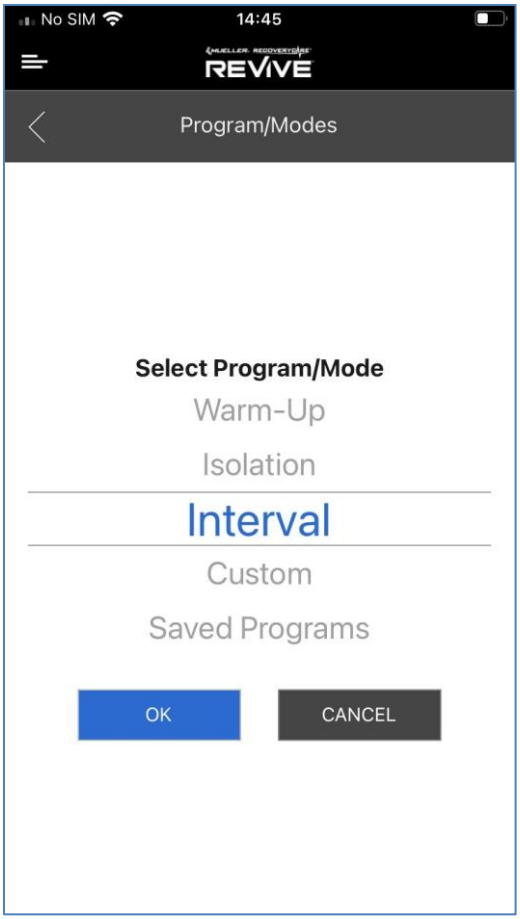
  b. To select the required pressure, swipe up/down the pressure values.
  c. To approve the selected pressure, tap **OK** or tap **CANCEL** to cancel selection and return to the Main Screen.

- Selecting treatment time
  a. Tap the **Time** button.
     The **Select Treatment Time** screen opens:



  b. To select the required treatment time, swipe up/down the time values.
     To select continuous treatment until stopped by user, swipe right the **Stay on** button.
  c. To approve the selected time, tap **OK** or tap **CANCEL** to cancel selection and return to the Main Screen.

- Setting Program/Mode
  a. Tap the **Program/Mode** button.
     The **Select Program/Mode** screen opens:



  b. To select the required program, swipe up/down the program names.
  c. To approve the selected program, tap **OK** or tap **CANCEL** to cancel selection and return to the Main Screen.

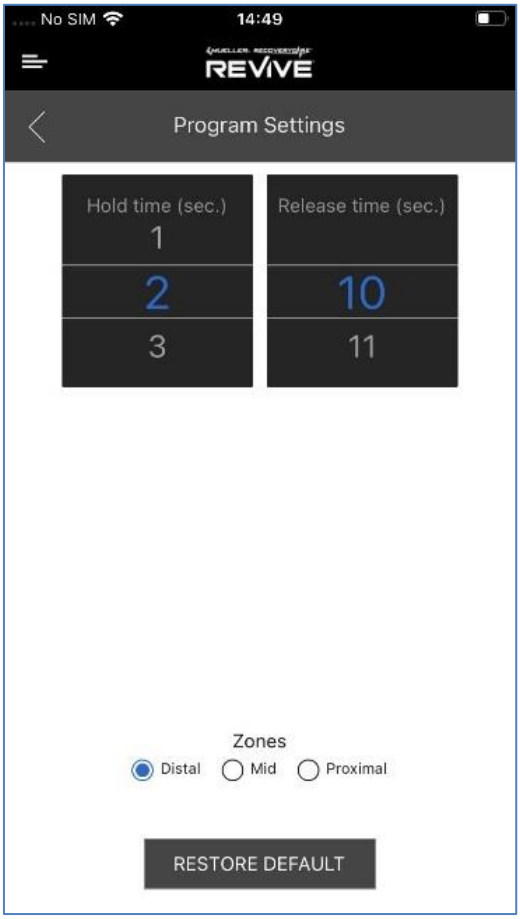
- Program Settings
  Recover and Warm-up Programs
  a. Tap the **Program Settings** button.
     The **Hold time** and **Release time** screen opens:

  b. To select the required Hold/Release time, swipe up/down the Hold/Release values.
  c. To approve the selected Hold/Release time values, tap **OK** or tap **CANCEL** to cancel selection and return to the Main Screen.

  To revert to Hold time and Release time factory default settings press the **RESTORE DEFAULT** button.

Isolation Program

a. Tap the **Program Settings** button.
   The **Hold time**, **Release time**, and **Zones** screen opens:

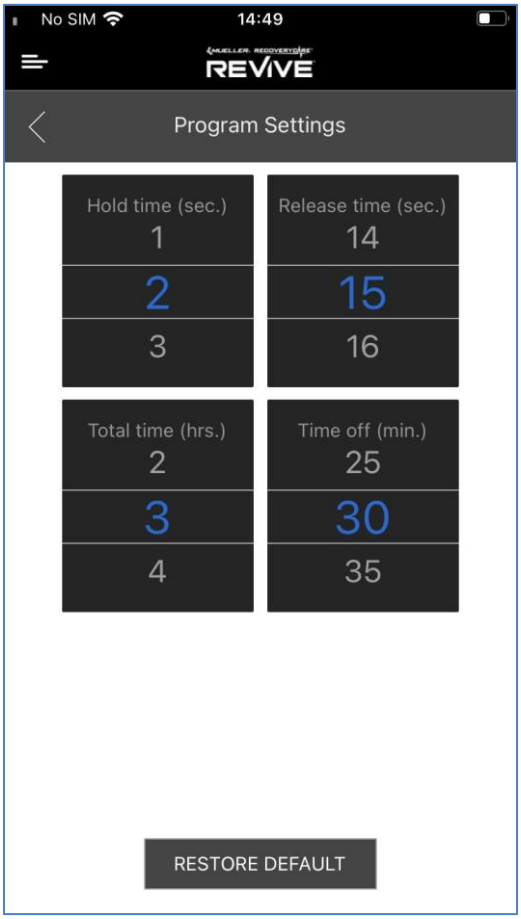


b. To select the required Hold/Release time, swipe up/down the Hold/Release values.
c. To select the treated zone, tap the zone radio button.
d. To approve the selected Hold/Release time values and the treated zone, tap **OK** or tap **CANCEL** to cancel selections and return to the Main Screen.

To revert to Hold time, Release time, and Zone factory default settings, press the **RESTORE DEFAULT** button.

Interval Program

a. Tap the **Program Settings** button.
   The **Hold time**, **Release time**, **Total Time**, and **Time off** screen opens:



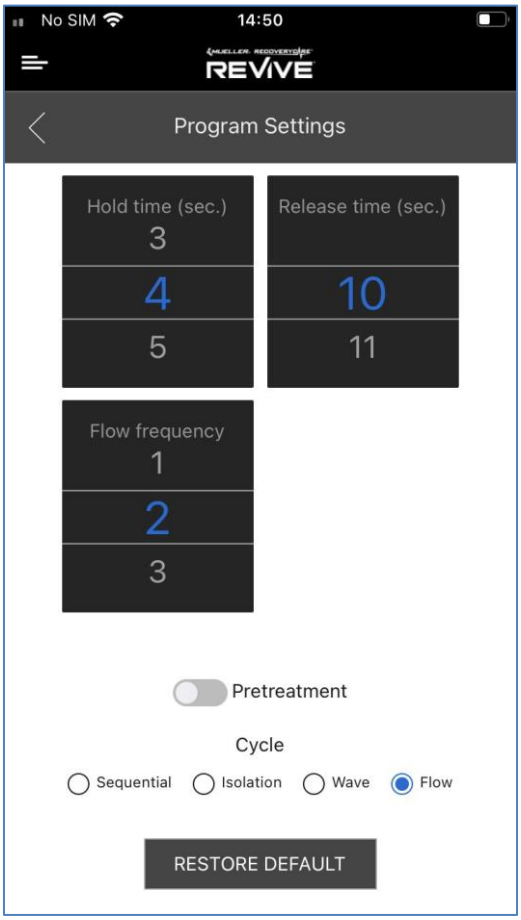
b. To select the required Hold/Release/Total time and Time off, swipe up/down the Hold/Release/Total time and Time off values.
c. To approve the selected Hold/Release/Total time and Time off values tap **OK** or tap **CANCEL** to cancel selections and return to the Main Screen.

To revert to Hold time, Release time, Total time, and Time off factory default settings, press the **RESTORE DEFAULT** button.

Custom Program

a. Tap the **Program Settings** button.

   The **Hold time**, **Release time**, **Flow frequency**, **Pretreatment**, and **Cycle** screen opens:



b. To select the required **Hold time** or **Release time**, swipe up/down the Hold time or Release time values.

c. To select the required **Flow frequency**, swipe up/down the Flow frequency value.

d. To select **Pretreatment**, swipe right the Pretreatment button.

e. To select the required **Cycle**, tap the cycle radio button.

f. To approve your selections, tap **OK** or tap **CANCEL** to cancel your selections and return to the Main Screen.

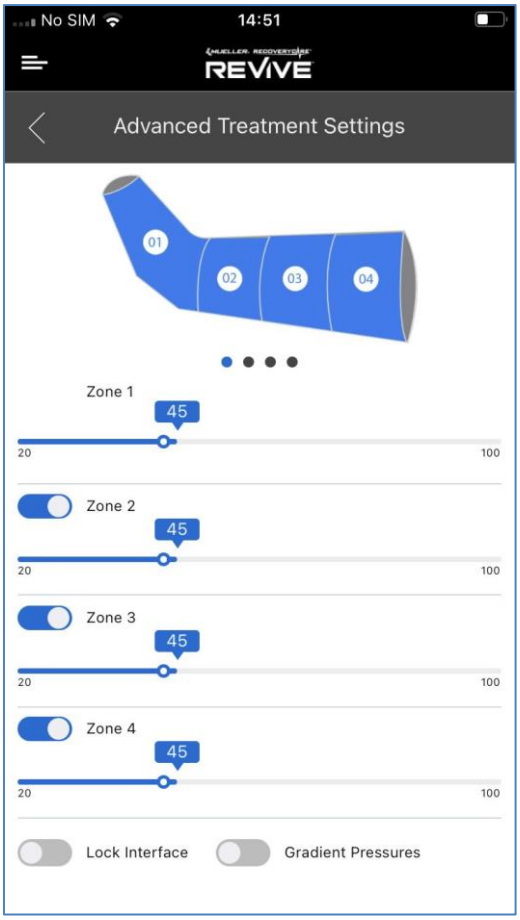
To revert to factory default settings, press the **RESTORE DEFAULT** button.

Advanced

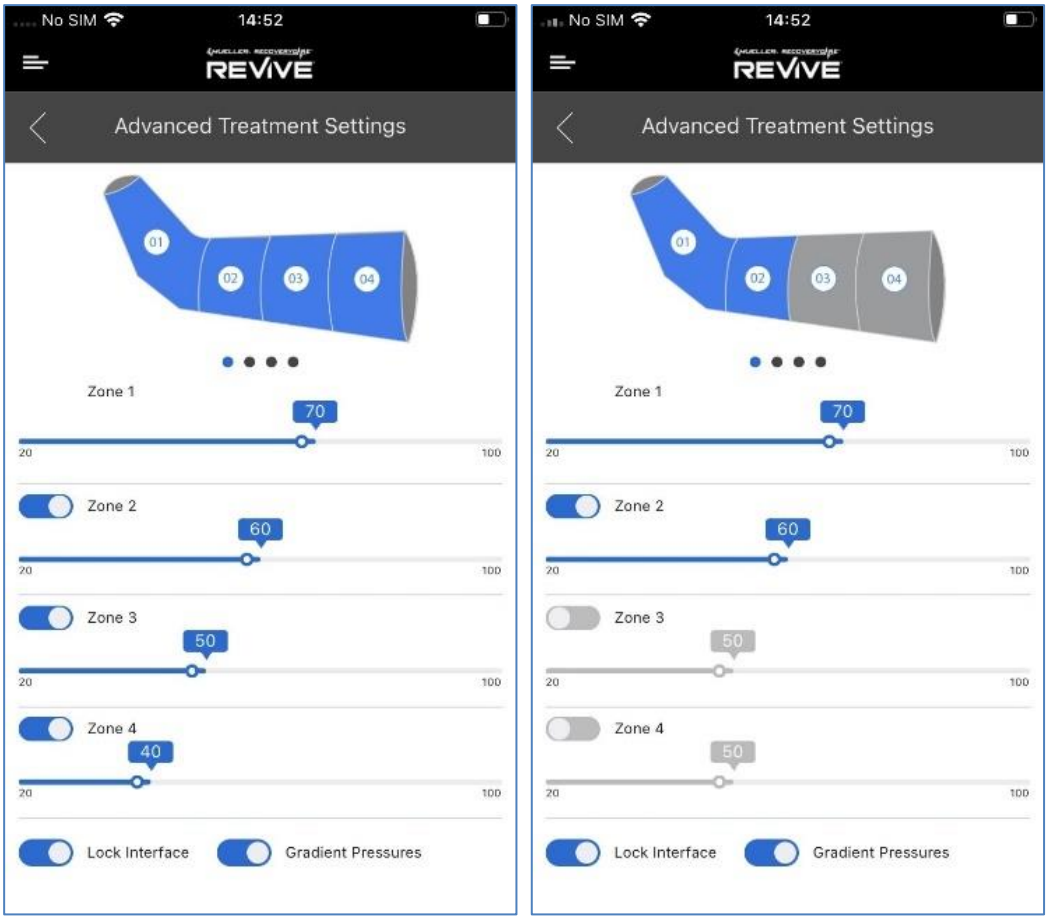
Tap the **Advanced** button.

The **Advanced Treatment Settings** screen opens:

> **Note:**
> Swipe the garment illustration to select Revive™ Arm Sleeve, Revive™ Pants, Leg garment (Revive™ Full Leg Boot or Revive™ Calf Boot), or Revive™ Half Jacket.



Setting Gradient Pressures



a. To enable gradient pressures, swipe right the **Gradient Pressures** button or swipe left to disable gradient pressures.
b. To increase/decrease pressure of each zone, swipe right/left the pressure value.
c. To deactivate a zone, swipe left the zone button.
   - When a zone is deactivated, the respective garment zone changes to gray.
   - When zone 2 or zone 3 is deactivated, the adjacent zones are deactivated automatically to prevent reverse gradient.
d. To lock interface, swipe right the **Lock Interface** button or swipe left to unlock interface.

Note:

Pressure can be selected for each zone individually. The Mobile App prevents setting a reverse gradient (in which the pressure is higher proximally), as a reverse gradient could cause wrong way flow (reflux).

The Mobile App maintains minimum pressure difference of 1 mmHg between adjacent zones, when Gradient Pressures is enabled.

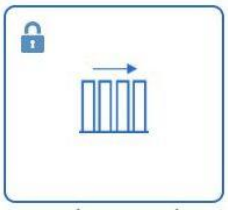
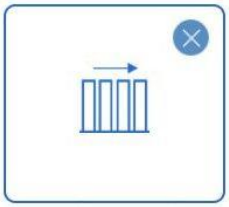
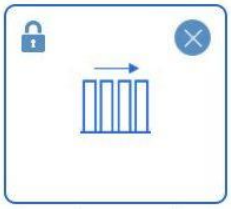
Increasing/decreasing pressure in one zone increases/decreases the pressure in the adjacent zones, when necessary, to prevent a reverse gradient.

Tip

Deactivated zone could be reactivated in the Advanced menu.
To reactivate a zone, swipe right the zone button.

Tip:
You can quickly decrease the overall pressure by swiping left zone-1 pressure or quickly increase the overall pressure by swiping right zone-4 pressure.

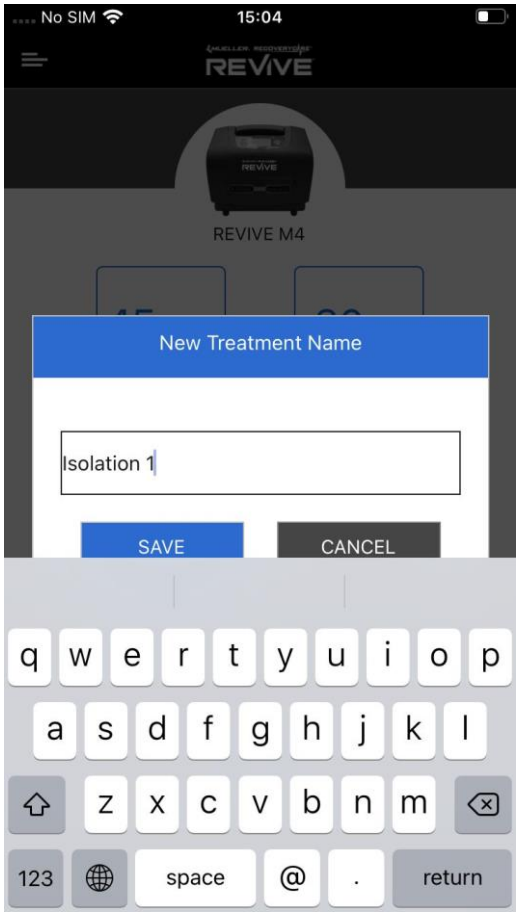
The **Advanced** button is displayed as follows when the interface is locked and/or zone(s) is/are deactivated:

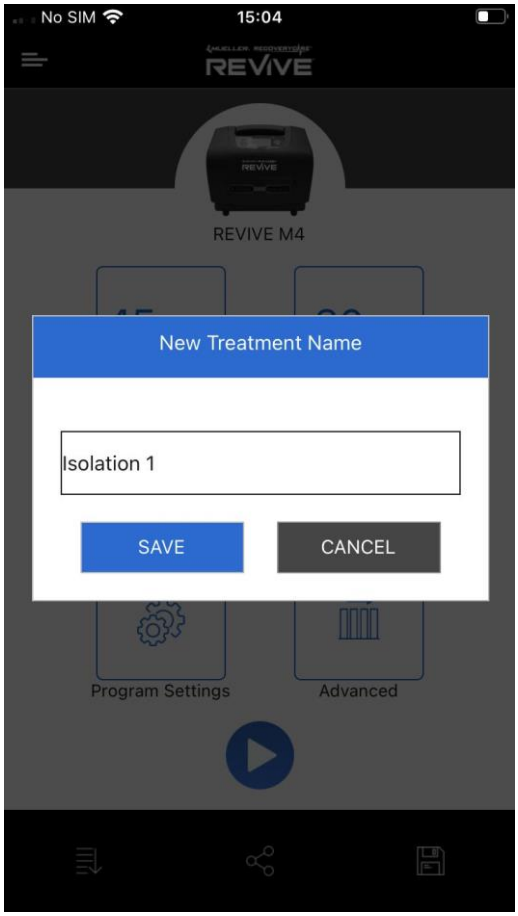
Gradient, interface locked	 No gradient, interface locked
Gradient, deactivated zone(s)	 No gradient, deactivated zone(s)
Gradient, interface locked, deactivated zone(s)	 No gradient, interface locked, deactivated zones

Saving a Treatment Program Created from Current Settings

a. Tap .

The **New Treatment Name** dialog box opens on the **Main Screen**.





b. Tap the **Enter Program name** field to assign a treatment name.
The virtual keyboard opens on the **Main Screen**.

c. Tap the program name using the virtual keyboard.

d. To approve the treatment name, tap **SAVE** or tap **CANCEL** to cancel and return to the Main Screen.

Loading/Deleting a Treatment Program

a. To load a treatment program, tap .

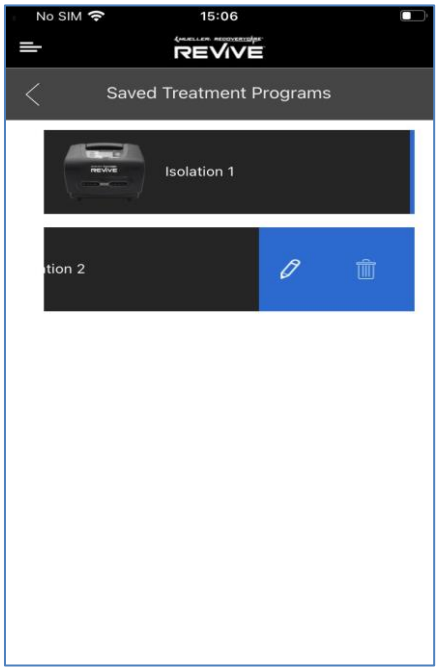
The **Saved Treatment Programs** screen opens.

b. To select a treatment program, tap the program on the list (**Isolation 1** in the example above).

The selected treatment program is loaded.

c. To delete a saved treatment program, swipe left the program you wish to delete (**Isolation 1** in the example above).

The **Isolation 1** program to be deleted is displayed as follows:



d. To delete the **Isolation 1** program, tap or tap to cancel deletion and edit the program.

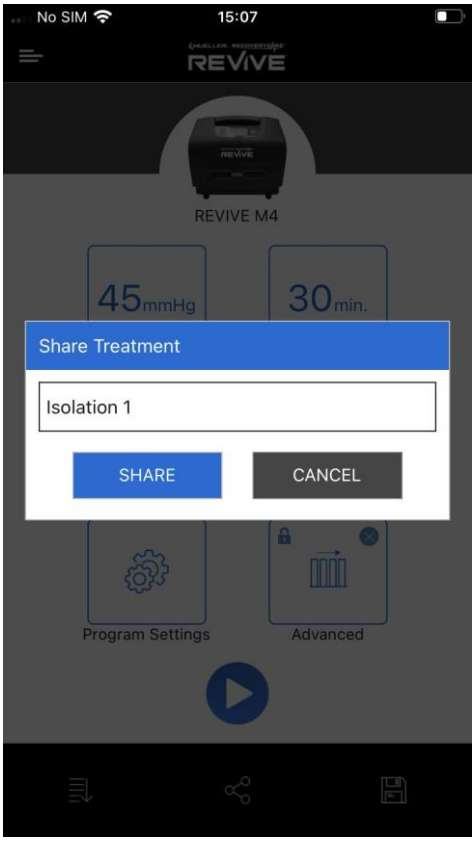
Sharing a Treatment Program

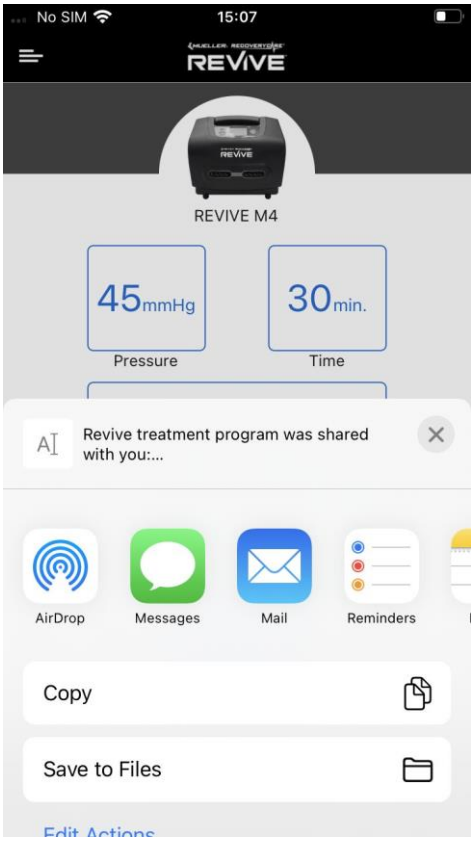
Settings that can be shared are those currently active in the Mobile App:

- A current program whose settings are adjusted using the application
- Settings read from the connected Console
- A saved program (requires loading the program first)

a. Tap .

A standard Share-via-Application screen opens (different depending on consoles and operating systems).





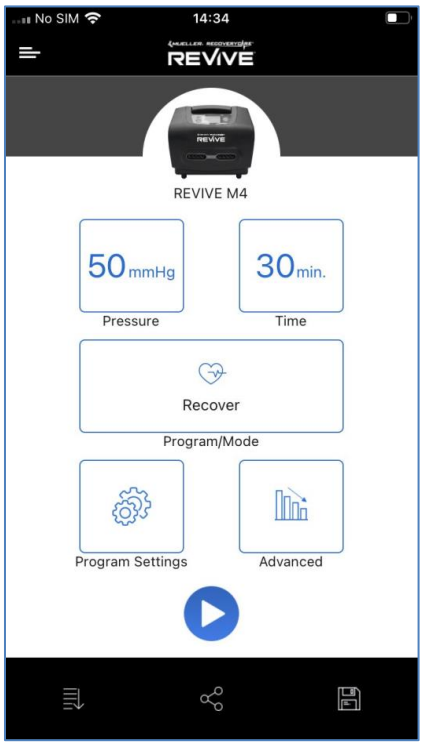
b. Select the application used for sharing (e.g., Outlook, Gmail, WhatsApp, etc.).

c. To add a shared program to your saved programs, open the program.

The program is opened by the Mobile App.

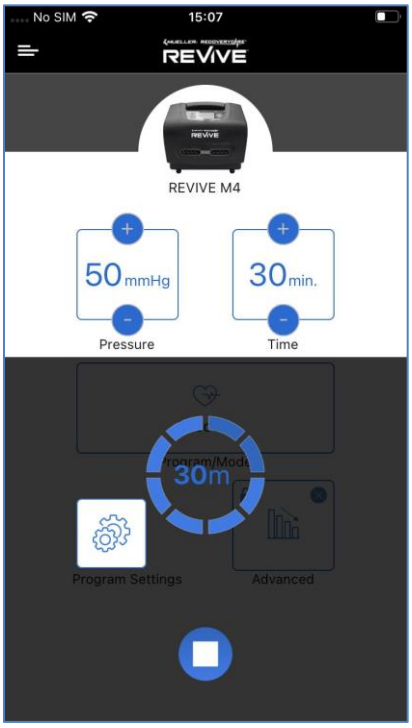
d. Save the program (see Saving a Treatment Program Created from Current Settings).

Starting Treatment



To start treatment, tap on the Main Screen.

The **Treatment Screen** opens.



- To adjust Time and/or Pressure, tap or .
- displays the remaining treatment time.
- To stop treatment, tap .

9. Maintenance and Storage

Cleaning the Console

Caution:

Disconnect the Console from electrical outlet before cleaning.

Let it dry completely before reconnecting it to the electrical outlet.

- Wipe clean using a **slightly damp cloth**.
- Do not allow any moisture or liquids to enter the Console!

Cleaning the Garments

a. Never submerge the garments in liquid. They are cleanable by surface wiping only.

b. Gently wipe the external and internal surfaces of the garment using a soft cloth, warm water not exceeding 100°F (40°C) and a mild detergent.
   - ♦ Do not submerge in liquid!
   - ♦ Do not allow liquid to enter the air inlets of the garment!

c. To remove any detergent residue, wipe with clear water, again taking care that water does not enter the air inlets of the garment.

d. Wipe dry using a soft towel only.

e. When dry, the external and internal surfaces of the garment may be wiped down with 70% alcohol or with appropriate fabric-safe disinfectant according to the manufacturer's recommendations.

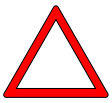
   When using alcohol, wear gloves and work in a well-ventilated area.

f. Allow the garment to air dry completely before use.

Wear gloves when cleaning garments and wash hands after cleaning.

As with any fabric garment, some fading of the printing and fabric may occur over time. This does not affect garment performance. Store away from direct sunlight to prevent fading, avoid scrubbing the printed areas, and do not spill excessive amounts of alcohol directly on the garment.

Contact your local distributor if you have questions about cleaning the Console or the garments.

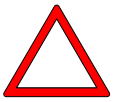


Caution:

- Do not hand or machine wash. Surface wipe only!
- Do not allow liquid to get into the air inlets.
- Do not use bleach.
- Do not dry clean.
- Do not wring, iron, tumble, or force heat dry.

Storage

a. Keep the Console, hoses and garments away from direct sunlight.
b. Store in a dry, shaded place (see caution below).
c. Do not twist or fold the hose bundle.
d. Store the DC power adapter and power cord lightly wrapped and secured.
e. Avoid folding the garments during storage.



Caution:

The Console can be transported or stored for short periods of time within:

- Temperature range of -4–158°F (-20–70°C)
- Humidity range of 10–93%rH non-condensing
- Atmospheric pressure range of 190–1060hPa.

Allow the Console to reach reasonable room temperature 50–86°F (10–30°C) before operating.

When the system has been stored in extreme temperature conditions of -20°C (-4°F) or 70°C (158°F) between uses, wait for two (2) hours before using the system.

Travel

- Make sure to obtain the proper power adapter plug for the location you visit.
- Follow all storage guidelines when packing the Console or garment.

Disposal

If the Console, hose bundle and/or garment(s) is to be disposed of, follow the local country regulations taking environmental factors into consideration.

Replacing the Battery

Note:
Use only batteries supplied by Mego Afek AC Ltd.

To replace the battery:

a. Open the cover of the battery compartment using a Philips screwdriver.

b. Carefully remove the used battery from its compartment.

c. Disconnect the battery cable.

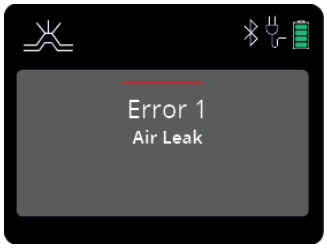
d. Connect the battery cable to the new battery pack, and then insert the battery pack carefully into its compartment.

e. Close the cover of the battery compartment using a Philips screwdriver.

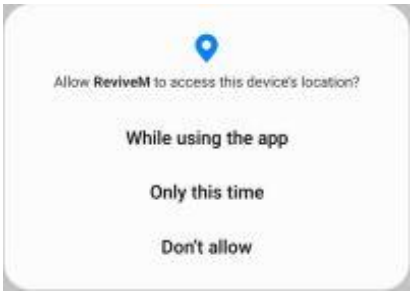
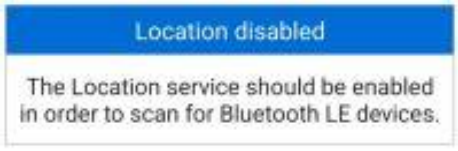
10. Troubleshooting

Note:
Before continuing, inspect all accessories for any defects.

Console Error Messages

Error Message	Meaning	Corrective Action
	See Table 3	See Table 3
Error 5 Over Pressure	See Table 3	See Table 3
Error 2/3/4 Internal Error	See Table 3	See Table 3

Mobile App Error Messages

Error Message	Corrective Action
	Displayed upon first opening of Mobile App after installation. If not pressing **Allow**, the App cannot connect to Bluetooth devices (Android only)
	Displayed if **Location** is not enabled on Smartphone
	Displayed if **Bluetooth** is not enabled on Smartphone

	Displayed when Mobile App is connected to Console and battery is almost empty. After tapping **OK**, the message is displayed again after a few minutes

Table 3 - Troubleshooting Guide

Symptom	Possible Cause	Corrective Action
The Console is not working.	No electricity and no battery power.	Inspect the electrical wall outlet. Additionally, replace the battery pack.
	DC power adapter	Verify that the DC power adapter is connected to the DC adapter socket on the Console, and the DC power adapter is connected to a 100–240 Volt wall outlet.
The Console starts working and stops immediately.	Air cannot move through the hose bundle.	Examine hose bundles for kinks, twists, and folds.
One garment inflates but the second one does not.	The second garment does not receive air.	Examine its hose bundle for kinks, twists, and folds.
The Console stops working, **Error 1 - Air Leak** message displayed, **Air Leak** icon turns On, and the buzzer beeps.	Hose bundle is not connected properly to garment or Console, or Prong Plug is not inserted into unused air outlet.	Examine and fasten all air connections. If treating only one limb, make sure the unused air outlet is plugged with the prong plug provided with the Console. If all air connections are OK and problem persists, contact Mueller Sports Medicine, Inc..
The Console stops working, **Error 2/3/4 - Internal Error** message displayed, **Warning** icon turns On, and the buzzer beeps.	Internal malfunction	Contact Mueller Sports Medicine, Inc..
The Console stops working, **Error 5 - Over Pressure**, and the buzzer beeps.	Kinks in garment(s)	Examine garment hose bundle for kinks, twists, and/or folds.
	Internal malfunction	Contact Mueller Sports Medicine, Inc..
The Console works at a very low pressure, regardless of the pressure set by the user.	Defective garment	Replace garment and examine again.
	Internal malfunction	Contact Mueller Sports Medicine, Inc..
An irregular noise.	Console transferring vibrations to a surface	Make sure the Console is standing evenly on all four of its bumpers.
	Internal malfunction	Contact Mueller Sports Medicine, Inc..

11. Troubleshooting Wireless Connection Problems

- The mobile application uses Bluetooth wireless technology for communication with the Console. In most cases of temporary communication loss, communication resumes automatically.
- In unlikely events of communication loss or application failure, user should close and reopen the application. Note the Console continues operating normally without interruption.
- Note proximity to RF emitters such as Wi-Fi access points, RFID anti-theft devices, or other wireless transmitting devices may cause communication disturbances. Make sure the Revive™ M4 Console is located at least 3 meters away from such emitters.
- When using the mobile application to configure and monitor the Console, make sure to remain within reach of the Console, which would allow you to turn off the power switch or change settings without using the mobile application.
- Note the Console is fully functional without the use of the mobile application.

12. Warranty and Contact Information

Manufacturer Address

Mego Afek AC Ltd.
Kibbutz Afek, 3004200
Israel

Warranty

- Mego Afek AC Ltd. warrants the Revive™ M4 Console and REVIVE™ garments to be free of defects in materials and workmanship. Contact Mueller Sports Medicine, Inc. with all warranty claims.

This warranty applies as follows:

- Console: for a period of twenty-four (24) months from date of purchase.
- Garments: for a period of twelve (12) months from date of purchase.

This warranty does not include, or cover malfunctions caused by unreasonable use, noncompliance with user and maintenance instructions, or damage caused by unauthorized or unqualified repairs.

Revive™ M4 Service Life

When used and maintained as instructed, the expected service life of the Revive™ M4 Console is five (5) years. Contact Mueller Sports Medicine, Inc. with all service claims.

Importer to the USA

Mueller Sports Medicine, Inc.
One Quench Drive
Prairie Du Sac, WI 53578

Distributor in the USA

Mueller Sports Medicine, Inc.
One Quench Drive
Prairie Du Sac, WI 53578
+1-608-643-8530, +1-800-356-9522
www.muellersportsmed.com

13. Bluetooth Wireless Technology Information

Bluetooth Compliance	Version 4.2 low energy
Operating Frequency	2.402–2.480 GHz
Output Power	0 dBm
Operating Range	3-meter radius (line of sight)
Network Topology	Star - bus
Operation	Slave
Antenna Type	Integrated chip type antenna
Modulation Type	Adaptive Frequency Hopping
Data Rate	Over the air: 1 Mbit/second Application throughput: 0.27 Mbit/s
Data Latency	6 mSec
Data Integrity	Adaptive Frequency Hopping
Robustness	24-bit CRC (cyclic redundancy check) 32-bit message integrity check
Quality of Service	This console uses Bluetooth smart technology for wireless communication, which allows for reliable communication in electrically noisy environments. If connection is lost, the console will automatically reconnect in a few seconds.
Bluetooth Profiles Supported	GAP, GATT, SM, L2CAP and Integrated Public Profiles
Authentication and Encryption	Supported

14. EMC Manufacturer Declarations

Electromagnetic Compatibility (EMC) Statement for Home Healthcare Environment

The Revive™ M4 system has been evaluated to international standard IEC 60601-1-2 "General requirements for basic safety and essential performance - Collateral standard: Electromagnetic compatibility - 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. See below recommended separation distances between portable and mobile RF communication equipment and the Revive™ M4 system.

Wireless communications equipment such as wireless home network devices, mobile phones, cordless telephones and their base stations, walkie-talkies can affect this equipment and should be kept at least a distance d = 3.3 m away from the system.

Rated Maximum Output Power of Transmitter (W)	Separation Distance* according to Frequency of Transmitter (m)
0.01	0.23
0.1	0.73
1	2.3
10	7.3
100	23

***Note**: The distance calculated from 800 MHz to 2.5 GHz

Caution: Basic Safety and Essential Performance

- This system should not be used adjacent to or stacked with other equipment and that if adjacent or stacked use is necessary, this system should be observed to verify normal operation in the configuration in which it will be used.
- The essential performance of the Revive™ M4 system as evaluated in IEC 60601-1-2 includes treatment completing cycle, presentation on the display is not interfered, and treatment parameters are not changed unintentionally.
- The following, but not limited to, are unacceptable risks that are not allowed: malfunction, non-operation when operation is required, unwanted operation when no operation is required, deviation from normal operation that poses unacceptable risk to operator or user, component failure, change in programmable parameter(s), change in operation mode, reset to factory defaults, and false positive or false negative alarm.

Guidance and Manufacturer's Declaration – Electromagnetic Emission		
The Revive™ M4 Console is intended for use in the electromagnetic environment specified below. The customer or the user of the console should assure that it is used in such environment.		
Emission Test	**Compliance**	**Electromagnetic Environment – Guidance**
RF emissions CISPR 11	Group 1	The console uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emission CISPR 11	Class B	The console 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.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations / flicker emissions IEC 61000-3-3	Complies	

Guidance and Manufacturer's Declaration – Electromagnetic Immunity			
The Revive™ M4 Console is intended for use in the electromagnetic environment specified below. The customer or the user of the Console should assure that it is used in such an environment.			
Immunity Test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environment - Guidance**
Electrostatic discharge (ESD) IEC 61000-4-2	±2, 4, 6, 8 kV contact ±2, 4, 8, 15 kV air	±2, 4, 6, 8 kV contact ±2, 4, 8, 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	±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 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	<5% U_T (>95% dip in U_T) for 0.5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles <5% U_T (>95% dip in U_T) for 5 sec	<5% U_T (>95% dip in U_T) for 0.5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles <5% U_T (>95% dip in U_T) for 5 sec	Mains power quality should be that of a typical commercial or hospital environment. If the user of the Console requires continued operation during power mains interruptions, it is recommended that the Console be powered from an uninterruptible power supply or a battery.
Power frequency (50Hz/60Hz) magnetic field IEC 61000-4-8	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Note: U_T is the AC mains voltage prior to application of the test level.			

Guidance and Manufacturer's Declaration – Electromagnetic Immunity			
The Revive™ M4 Console is intended for use in the electromagnetic environment specified below. The customer or the user of the Console should assure that it is used in such an environment.			
Immunity Test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environment - Guidance**
Conducted RF IEC 61000-4-6	10 Vrms 150 kHz to 80 MHz	10 Vrms	Portable and mobile RF communication equipment should be used no closer to any part of the Console, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. **Recommended separation distance** $d = 1.2\sqrt{P}$ $d = 1.2\sqrt{P}$ 80 MHz to 800MHz $d = 2.3\sqrt{P}$ 800 MHz to 2.7 GHz Where *P* is the maximum output power rating of the transmitter in Watts (W) according to the transmitter manufacturer and *d* is the recommended separation distance in meters (m). 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[(b)]. Interference may occur in the vicinity of equipment marked with the following symbol:
Radiated RF IEC 61000-4-3	10 V/m 80 MHz to 2.7 GHz	10 V/m	

Note 1: At 80 MHz and 800 MHz, the higher frequency range applies.

Note 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

(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 the Console is used exceeds the applicable RF compliance level above, the Console should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the Console.

(b). Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Recommended Separation Distances between Portable and Mobile RF Communication Equipment and the Console

The Revive™ M4 console is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the console can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communication equipment (transmitters) and the console 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)		
	150 kHz to 80 MHz	80 MHz to 800 MHz	800 MHz to 2.7 GHz
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 rated at a maximum output power not listed above, the recommended separation distance 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 Watt (W) according to the transmitter manufacturer.

Note 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

Note 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.