# **Strength & Recovery System**



# **Instruction & Operating Manual**

# **Read Before Using**





# iReliev™ Strength & Recovery System

# iReliev™ Pain Management System

# **Intended Use**

The iReliev<sup>™</sup> Strength & Recovery System, model no. ET-7070 is intended for:

- For temporary relief of pain associated with sore and aching muscles in the lower back due to strain from exercise or normal household and work activities. (Choose TENS Modes P1 through P7)
- For temporary relief of pain associated with sore and aching muscles in the upper and lower extremities (arm and/or leg) due to strain from exercise or normal household and work activities. (Choose TENS Modes P1 through P7)
- For symptomatic relief and management of chronic, intractable pain and relief of pain associated with arthritis. (Choose TENS Mode P8)
- For use by healthy adults for the stimulation of healthy muscles in order to improve or facilitate muscle performance. (Choose EMS Modes P1 through P6)

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# **Safety Instructions**

**Read instruction manual before operation.** Be sure to comply with all "CAUTIONS" and "WARNINGS" in the manual. Failure to follow instructions can cause harm to user or device.

Please read the following information carefully before using iReliev® Strength & Recovery System.

#### What is TENS?

The more precise term is Transcutaneous (meaning "through the skin") Electrical Nerve Stimulation (TENS). A TENS unit is an electrically powered device used to apply an electrical current to electrodes on a patient's skin to relief pain associated with sore or aching muscles.

#### What is EMS?

EMS stands for Electrical Muscle Stimulation. An EMS device is used to stimulate healthy muscles in order to improve muscle performance.

## Warnings for proper use and safety

- Do not use this System if you have a cardiac pacemaker, implanted defibrillator (s) or any other implanted metallic or electronic device. Such use could cause electric shock, burns, electrical interference, or death.
- Do not use this System if you have undiagnosed chronic pain.
- Do not use if you are pregnant. The safety of electronic muscle stimulation over the pregnant uterus has not been established.
- Do not use if you suffer from cancer. The effects of electronic stimulation on cancerous tissue are unknown.
- Do not use if you are under medical supervision for cognitive dysfunction as you may not be able to comply with safety instructions.
- Do not use if the unit is in close proximity to shortwave or microwave diathermy equipment or you are connected to high-frequency surgical equipment, because of risk of device interference.
- Do not wear the device or place electrode pads over areas at which drugs/medicines are administered (short-term or long-term) by injection (e.g. hormone treatment).
- Do not use if you have epilepsy.
- Do not use if you have recently undergone a surgical procedure.
- Do not use following acute trauma or fracture in case of critical ischemia of the limbs.

# ▲ WARNING AND PRECAUTIONS

- If you are under the care of a Physician, consult with your Physician before using this System.
- The long-term effects of this System are not known.
- Do not place the pads on or close to your heart.
- Do not place the pads around or close to your neck. Do not apply stimulation over the neck. Severe spasm of the muscles may occur and the contractions may be strong enough to close the airway or cause difficulty in breathing. Stimulation over the neck could also have adverse effect hearing or blood pressure.

 $(\mathbf{1})$ 

- Do not apply stimulation across the chest because the introduction of electrical current into the chest may cause rhythm disturbances to the heart.
- Do not place the pads on or around your head. The effects of stimulation of the brain are unknown.
- Do not use the electrode pads over or close to sores.
- Do not place the electrode pads on the front or sides of the neck across or through the heart (one pad on the front of the chest and one on the back), in the genital region, or on the head, because of the risk of stimulating inappropriate muscles and organs.
- Do not place the electrode pads over any recent scars, broken or inflamed areas of infection or susceptibility to acne, thrombosis or other vascular problems (e.g. varicose veins), or any part of the body where feeling is limited.
- Do not place the electrode pads over areas of injury or restricted movement (e.g. fractures or sprains).
- Do not use while sleeping.
- Do not use if you feel numbness
- Do not use in or close to water.
- Do not apply stimulation across the chest because the introduction of electrical current into the chest may cause rhythm disturbances to the heart, which could be lethal.
- Do not use the pads over or close to cancerous lesions.
- Use the electrode pads only on normal, healthy, clean and dry skin. Do not use the electrode pads on open wounds or rashes, or over swollen, red, infected or inflamed skin.
- If you have ever had back surgery, consult your Physician before using this System.
- You must position the pads and operation the unit ONLY as indicated in this manual.
- Avoid areas in injury or restricted movement (e.g. fractures or sprains)
- Avoid placing the pads over metal implants.
- Do not use in the bath or shower, or in an environment of elevated humidity (e.g. Sauna, hydrotherapy, etc).

## Wait before using this system until:

- At least 6 weeks after the birth of your baby (you must consult your doctor before use).
- One month after an IUD contraceptive device (e.g. coil) has been fitted (you must consult your doctor before use).
- At least 3 months after having a caesarean section (you must consult your doctor before use).
- The heavy days of your period have finished, because vigorous abdominal exercise is not recommended at this time.

# A Precautions

- Read Operating and Instruction Manual before using this System for the first time.
- Keep this manual available whenever you use the System.
- The System is intended for personal use on healthy adult muscle only.
- The safety of using the System during pregnancy or birth has not been established.
- The effectiveness of the System depends greatly on a person's individual physical condition. It may not always be effective for every user.
- The safety of neuromuscular stimulation during pregnancy has not been established.
- Use caution when and/or if:
- User has skin areas that lack normal sensation.
  - Following surgical procedures if muscle contractions might impede the healing process.
  - Over a menstruating or pregnant uterus.
  - There is a tendency to hemorrhage following acute trauma or fracture.
- Place electrodes in accordance with illustrations in the User Manual.
- This unit should not be used while driving, operating machinery or during any activity in which involuntary muscle contractions may place the user at undue risk of injury.
- Some users may experience skin irritation or hypersensitivity due to the electrical stimulation or the conductive medium.
- Keep the stimulator out of the reach of children.
- (2)

- Application of moderate heat (thermal wrap) to muscles as well as moistening skin prior to treatment improves treatment efficacy; use of cold packs on treated muscles after treatment is likewise recommended.
- This unit should only be used with the leads, electrodes and accessories provided by the manufacturer.
- The device is not intended for medical use, for the treatment of any medical condition or for any permanent physical changes.
- Contact ExcelHealth Inc., or an authorized dealer, if your unit is not working correctly. Do not use in the meantime. Replace batteries.
- An effective session should not cause discomfort.
- For first time users, muscle stimulation can be an unusual sensation. We recommend that you begin in a seated position with low stimulation intensity settings to familiarize yourself with the sensation before progressing to higher intensity settings.
- The leads and electrodes pads must not be connected to other objects.
- Do not over exert yourself while using muscle stimulation. Any workout should be at a comfortable level for you.
- Do not place pads over jewelry or body piercings.
- Start all sessions in a sitting position (fig.a). If necessary, secure the limb(s) to be exercised before using this device.

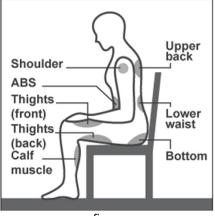


fig. a

#### ▲ <u>Use Caution and consult your Physician before using System if any of the following conditions</u> apply to you:

- You have any serious illness or injury not mentioned in this guide.
- You have recently undergone a surgical procedure.
- You take insulin for diabetes.
- You use the unit as part of a rehabilitation program.
- If you have suspected or diagnosed heart problem.
- If you have suspected or diagnosed epilepsy.
- If you have a tendency to bleed internally following an injury.
- If you recently had surgery, or have ever had surgery on your back.
- If areas of skin lack normal sensations, such as skin that tingles or is numb.
- During menstruation or during pregnancy.
- Some people may feel skin irritation or experience a very sensitive feeling in the skin due to electrical stimulation. If this occurs, stop using your System and consult your Physician.
- If skin under one of more pads feels irritated after using the stimulator for a long period of time, use the stimulator for a shorter period of time.
- Minor redness at stimulation placement is a normal skin reaction. It is not considered as skin irritation, and it will normally disappear within 30 minutes after the electrodes are removed. If the redness does not disappear after 30 minutes from the removal of electrodes, do not use the stimulator again until after the excessive redness has disappeared.
- Turn off the stimulator if the stimulation feels unpleasant or does not provide pain relief.
- Keep your System out of the reach of children.
- Use your stimulator only with the pads, snap cables and accessories recommended by the manufacture.
- Do not use this System when driving, operating machinery or when swimming.
- Before removing the belt and pads, be sure to power off device to avoid unpleasant stimulation.

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#### After strenuous exercises or exertion:

• Always use lower intensity to avoid muscle fatigue.

## Important:

- Do not use your unit at the same time as any other device which transfers an electrical current into the body (e.g. another muscle stimulator).
- Cease using your unit if you are feeling light headed or faint. Consult a Doctor if this happens.
- Do not touch the pads or metal studs while the unit is switched on.
- Do not use unit if you are wearing a belly button ring. Remove ring before session.

Note: If you are in any doubt about using device for any reason, please consult your doctor before

# **Electrode Pad Precautions**

- To reposition the pads during a session, always pause the program currently running, reposition the pads as directed on page 7 and page 9 and then restart the program again.
- Only use iReliev<sup>™</sup> brand electrode pads with your device. Any others many not be compatible with your unit and could degrade the minimum safety levels.
- The electrode pads are for single person use only.
- Do not plunge the pads into water.
- Do not apply solvents of any kind to the pads.
- Always ensure the unit is OFF before removing the pads.
- Apply the whole surface of the pads firmly to the skin. Do not use pads which do not adhere properly to the skin.
- If your skin is red under the pad after a session, do not start another session in the same area until your redness has completed disappeared.

#### **Adverse Reactions**

- You may experience skin irritation and burns beneath the stimulation electrodes applied to your skin.
- You may experience headache and other painful sensations during or following the application of electrical stimulation near your eyes and to your head and face.
- You should stop using the device and should consult with your physician if you experience adverse reactions from the device.

# Conditions that may affect your System

Since the stimulator is a battery-operated electronic System, its output performance and safety may be affected greatly in extreme humidity. Therefore, it is very important to keep the stimulator dry to ensure the safety and performance of the stimulator.

4)

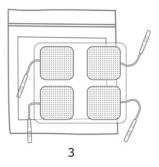
# **PACKAGE CONTENTS**

- 1. ET-7070 iReliev™ Strength & **Recovery Device**
- 1 clip holder 2.
- 3. Electrodes CM-5050, sized 2" x 2", 4 pieces/pack
- 4. 3 AAA batteries
- 5. 2 lead wires1 storage bag
- 6. ET-7272 size 130x90 mm
  - 2 pcs/pack



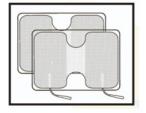
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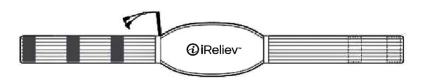




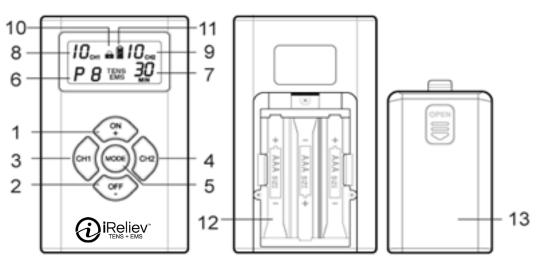




7. Optional Conductive Back Wrap Accessory, Model # ET-1515



# ABOUT THE iReliev<sup>™</sup> DEVICE



#### Front View

- Power on / adjust / increase setting key 1.
- Power off / adjust / decrease setting key 2.
- 3. CH1 key
- CH2 key 4.
- 5. Therapy Time/Mode/Program selection Key
- 6. Program number
- 7. Therapy time remaining

#### Rear View

8.

- CH1 intensity level 9.
  - CH2 intensity level
- 10. Lock status indicator 11. Battery status indicator
- 12. Batteries compartment
- 13.
  - Battery cover

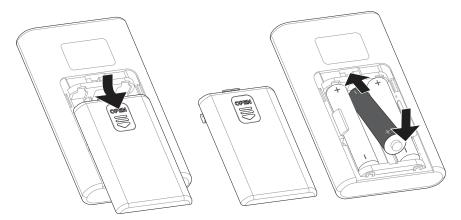
# STEP BY STEP OPERATION GUIDE FOR TREATMENT

## Preparing the Skin for Running a Session

Proper preparation of the skin covered by the electrodes allows more stimulation to reach targeted tissues, prolongs electrode life, and reduces the risk of skin irritation. After connecting the lead wire(s) to the stimulator, use the following steps to prepare your skin at the electrode placement sites:

- 1. Determine the placement sites for the electrodes.
- 2. Wash the area with mild soap and water (do not use alcohol). Rinse and dry thoroughly.
- 3. Trim excess body hair from the area with scissors (do not shave).
- 4. Optionally, apply skin prep to the area to form a protective barrier on your skin. Apply, let dry, and apply electrode as directed. This will both reduce the chance of skin irritation and extend the life of your electrodes.
- 5. When removing electrodes, always remove by pulling in the direction of hair growth.
- 6. It may be helpful to apply skin lotion on electrode placement area when not wearing electrodes.

# **Inserting/Changing the Batteries**



- 1. Open the battery compartment at the back of the device by pushing the battery cover labelled "Open" downward (this area features raised marks for easy identification).
- 2. Insert 3 AAA (1.5 V) batteries in the battery compartment; make sure to match up the symbols (+/–).
- 3. Close the battery cover by carefully placing the stud into the slot in the rear area and sliding it upward, applying slight pressure.
- 4. Follow the same procedure when replacing the battery at a later date.

▲ Note : for important precautions regarding the batteries ,please be informed:

- Always use only 3x1.5V (AAA) batteries.
- Keep away from children.
- Do not recharge.
- Do not short-circuit.
- Do not throw into a fire.
- Please recycle. Do not dispose of old batteries with your household waste; dispose of them safely at your recycling centre or business where the batteries were purchased.

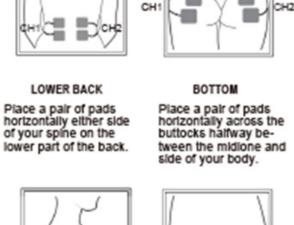
# NOTE: the batteries should last between 30 and 60 application depending on stimulation times and frequencies.

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# **Connecting the Cable to The Device**

- 1. Connecting the lead wire to the electrodes before applying to the Skin.
- 2. Insert the connector plugs into sockets at the top of unit.

# Placement of the Electrode Pads for TENS (Treatment of Pain)





SHOULDER

Place one half of the pad on the front of

your shoulder and the

other on the side.

BACK OF THIGHS

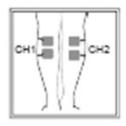
Place each pair of pads horizontally across your hamstrings.

7

CH2

CH2

CH1



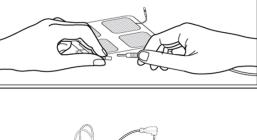
FRONT OF THIGHS

Place each pair of pads horizontally across each thigh muscles.

CALF MUSCLES

Place each pair of pads horizontally across call muscles .Do not place them too low on the leg. as this can result in an uncomfortable contraction.

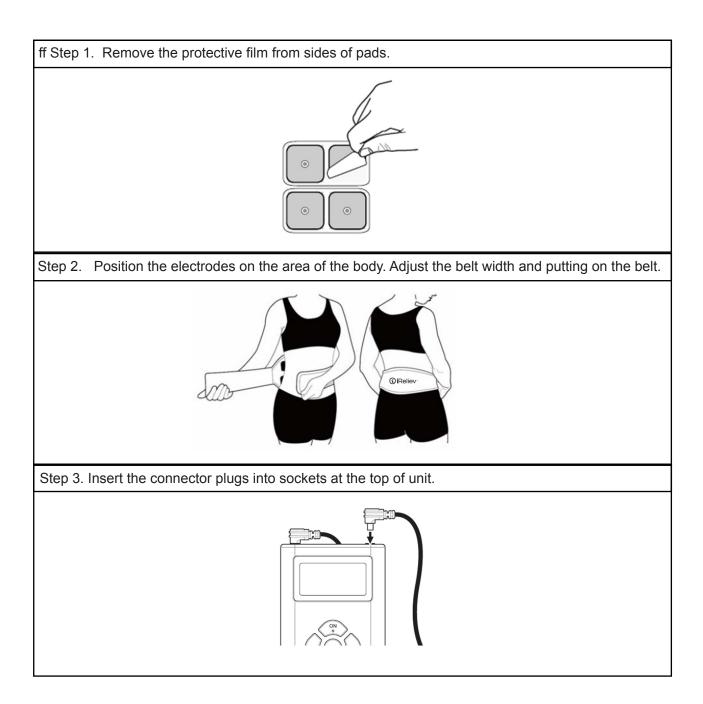
Note: 1. Recommended Electrodes size 5" x 3.5", for larger (e.g. leg muscles, lower back), and Size 2" x 2: for smaller areas such as forearm muscles etc.





CH2

- 2. You may need help placing the Electrode Pads onto hard to reach areas (lower & upper back). *Or,*
- 3. You could use Optional Conductive Back Wrap (ET-1515) for temporary relief of pain associated with sore and aching muscles in the lower back.

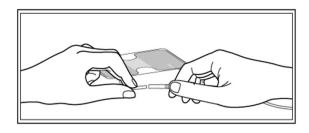


For the Conductive Back Wrap, additional pads, and replacement parts, visit www.iReliev.com

Note for EMS users: The belt can be used for your back or your stomach.

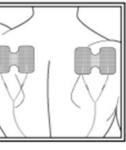
# Placement of the Electrode Pads for EMS

- 1. Connecting the lead wire to the electrodes before applying them to the Skin. Use the large Electrode Pads for EMS.
- 2. The pad placement chart hereafter illustrates the correct placement of the pads for a selection of target muscles.

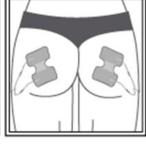




LOWER BACK Place a pair of pads horizontally either side of your spine on the lower part of the back.



UPPER BACK Place a pair of pads horizontally either side of your spine on the upper part of the back.



BOTTOM Place a pair of pads horizontally across the buttocks halfway between the midlone and side of your body.



FRONT OF THIGHS

Place each pair of pads horizontally across each thigh muscles.



# SHOULDER

Place one half of the pad on the front of your shoulder and the other on the side.

ABS

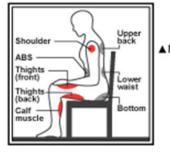
Place each pair of pads horizontally either side of your navel.

BACK OF THIGHS Place each pair of pads horizontally across your hamstrings.



#### CALF MUSCLES

Place each pair of pads horizontally across calf muscle. Do not place them too low on the leg, as this can result in an uncomfortable contraction.



▲ Note : 1. When stimulating the muscles of the arms or legs bear in mind that the muscle contraction may cause involuntary limb movement, which could cause injury to you or others. Always ensure the limb is secured to prevent movement.

Do not turn the unit on until all electrodes and lead wires are properly attached.

Note: Always start with a low intensity level, increase gradually. You may use any of the modes for EMS.

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# **Turning On the Device**

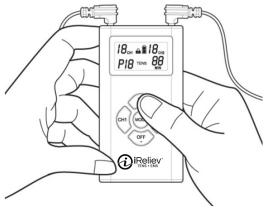
- 1. Press and hold the ON+ button for one (1) second to turn on the device.
- 2. The most recently selected treatment time and program will flash when the unit is turned on.
- ▲ Note : Do not turn the unit on until all electrodes and lead wires are properly attached.
- ▲ Note : When stimulating the muscles of the arms or legs in the EMS Mode, bear in mind that the muscle contraction may cause involuntary limb movement which could cause injury to you or others. Always ensure the limb is secured to prevent movement.

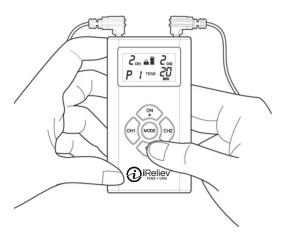
# **Turning Off the Device**

- 1. The device turns off automatically after the therapy session time has elapsed.
- To turn the unit off manually, press the OFF- button for three
  (3) seconds. The display will go blank and the device will turn off.
- 3. In an emergency you may also pull the connector(s) from the device and then remove the belt.
- ▲ Note : To prevent unpleasant electric shocks, never remove the Electrodes while it is still turned on.

#### Selecting the Treatment Time

- 1. Press MODE. The preset (default) treatment time will flash on the display.
- 2. To increase or decrease the treatment time, press the button ON + (to increase) or the button OFF (to decrease) repeatedly until the desired duration appears on the display.
- 3. Press MODE again to save your selection. The treatment time you selected will appear on the display the next time you turn the device on.
- ▲ Note: If you change programs during the course of a therapy session, the treatment time will not reset unless you manually reset it by performing the steps described above.



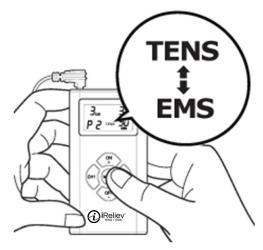


# SelectingTENS OR EMS Programs

# The device offers 14different pre-set treatment programs for both TENS (P1-P8) and EMS (P1-P6) modes; the programs differ with respect to varying pulse widths and frequencies.

Choosethe mode that is appropriate to your needs or gives you the greatest pleasure

- Press MODE after treatment time is set. The preset (default) therapy mode TENS/EMS will flash on the display. Use ON + or the button OFF – , if you would like to change the therapy mode.
- Press Mode again, the numeric number of program is then flashing.
   Press the button ON + (to increase) or the button OFF – (to decrease) for choice of program of the selected modality.
- Press MODE again to save your selection. The treatment time you selected will appear on the display the next time you turn the device on.
- ▲Note : If you change programs during the course of a therapy session, the treatment time will not reset unless you Manually reset it by performing the steps described above.



# For TENS (P1-P8) Programs:

When using any of the 8 programs for pain relief always start with the lowest intensity and gradually increase the level of intensity until you feel a "tingling" sensation. All programs are different and therefore feel differently. You may try all 8 programs in the beginning and choose one that feels pleasant. Never increase the intensity to a level so that it hurts, always stay under the point of discomfort. Start with short sessions of 5 or 10 minutes until your body gets used to the stimulation.

Program	Max.	Phase duration	Rate	Function Mode
P1	80mA	260uS	15Hz	Constant
P2	80mA	260uS	60Hz	Modulated
P3	80mA	260uS	60Hz	Constant
P4	80mA	260-156uS	2 - 60Hz	Modulated
P5	80mA	260-156uS	60Hz	Modulated
P6	80mA	260uS	7 <->60Hz	Modulated
P7	80mA	260-156uS	60Hz	Modulated
P8	80mA	210uS	2.45~245 Hz	Cycle

**TENS P1 - P8 Technical Attributes** 

All electrical specification ±20%

## **TENS P1 - P8 Potential Benefits**

Program Mode	Potential Benefits	You should feel
P1	For temporary relief of pain associated with sore and aching muscles in the lower back due	Continuous comfortable tingling. The underlying pain should decrease gradually after treatment.
P2	to strain from exercise or normal household and work activities.	Comfortable pulsing sensation. The underlying pain should decrease almost immediately.
P3	For temporary relief of pain associated with sore and aching muscles in the upper and lower	Comfortable pulsing sensation. The underlying pain should decrease almost immediately.
P4	extremities ( arm and/or leg) due to strain from exercise or normal household and work activities.	Variable comfortable tingling and pulsing sensation (sensation should appear to come in waves). Pain should ease and there should be relief after treatment.
P5		Variable comfortable mild tingling sensation (sensation will appear to come in waves).
P6		Variable comfortable pulsing and pumping action (action will appear to come in waves).
P7		Variable comfortable tingling and pumping action (action should appear to come in waves).
P8	For symptomatic relief and management of chronic, intractable pain and relief of pain associated with arthritis.	Variable comfortable tingling and pulsing sensation (sensation should appear to come in waves). Pain should ease and there should be relief after treatment.

# For EMS (P1-P6) programs:

When using the device for muscle stimulation (EMS) any of the 6 programs may be used. The intent is to cause a muscle to contract, and then release. All 6 programs will achieve contraction and vary mainly by the rate and duration of the contractions. As with any exercise regiment, start out slowly with low intensity levels for a warm-up (5~10min). You may increase intensity level and treatment time as you progress with your muscle performance. Use the device regularly over a longer period of time as to maintain the benefit you may have gained during "exercise".

Program	Pulse Width (uS)	Ramp up (sec)	Hold on (sec)	Ramp down (sec)	Off Time (sec)	Pulse rate (Hz)
P1	<u>300</u>	-	2	-	1	40-99
P2	200	-	-	-	-	4
P3	300	-	-	-	-	5
P4	200	-	2	-	1	99
P5	200	2	6	2	1	4-20
P6	300	2	5	3	10	50

## **EMS P1-P6 Technical Attributes**

All electrical specification ±20%

## **EMS P1-P6 Potential Benefits**

Mode / Exercise Program	What you Should Feel & Potential Benefits	Suggestion
P1 Exercise Preparation	This program gently warms up the muscles prior to exercise; it feels like a rhythmic massage.	Increase the intensity until you get a strong but comfortable muscle movement, 10 min/duration.
P2 Active Recovery	This program produces muscle twitches at very low frequency and it feels like a tapping massage, for muscle recovery from fatigue and becoming more relaxed with reduced stiffness.	Use it after intense exercise to promote recovery and relaxation, 30 min/duration.
P3 Active Recovery	This program is similar to P2, except that the muscle twitch rate slows down during the session. It feels like a tapping massage, but softer than P2.	Use it after intense exercise to promote recovery and relaxation, 20 min/duration.
P4 Active Recovery	This program activates the muscle in a short contraction/relaxation cycle. It feels like a kneading massage, smother than P2/P3.	Use it after intense exercise to promote recovery and relaxation, 20 min/duration.
P5 Build Endurance	This program uses a low frequency pulse train which favours slow twitch fibers, for developing aerobic capacity and capillary supply. It improves fatigue resistance during long duration moderate intensity exercise.	The exercise comprises an alternating sequence of work and rest phases lasting several seconds. Increase the intensity until you get a strong and deep muscle contraction. Do not exceed your comfort level, 20min/duration.
P6 Muscle Strengthening	This program uses a pulse frequency appropriate to fast twitch muscle fibers. It improves their anaerobic capacity and is used for improving maximum muscle strength.	The exercise comprises a sequence of work phases separated longer relaxation phases. Increase the stimulation intensity until you get a strong and deep contraction. Do not exceed your comfort level, 20 min./Duration.

# Selecting the Therapy Intensity Level

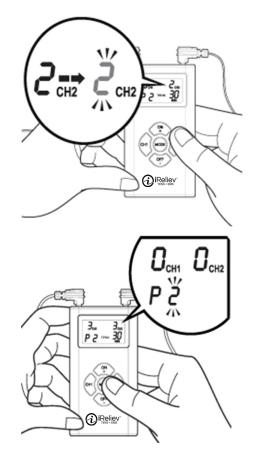
This device offer a maximum of 25 intensity levels.

The design of the device does not allow the user to modify any of the electrical parameters. The only adjustment that can be made is the electrical intensity which is set to a predetermined maximum current that is well with in safe limits. The intensity of the electrical current determines the number of working fibers in the stimulated muscles. The lower the current intensity the lower the number of working fibers in the muscle. The higher the current intensity the greater the number of working fibers in the muscle.

If using the device for help with temporary relief of pain associated with sore and aching muscles then you will find that setting the current intensity to your own comfortable and pleasing level will give you much satisfaction. This level is different for each user so adjusts slowly and accordingly.

If you desire to stimulate healthy muscles (EMS) in order to improve and facilitate muscle performance then you want to achieve a significant number of working fibers. You require a minimum intensity (approx. 30mA) to accomplish this. This can be achieved relatively quickly (2 to 3 sessions) by progressively increasing the intensity during the session. Once this threshold is reached, continue to progressively increase the current intensity making the session more effective.

- 1. Intensity is adjustable according to the channel selected. Select the channel you wish to adjust by pressing CH1 or CH2. "CH1" or "CH2" will flash on the display.
- To increase or decrease the intensity, press ON + (to increase) or OFF – (to decrease) repeatedly until the desired intensity level flashes on the display.
- ▲ Note : You will feel the intensity increase or decrease as you select the intensity level. You can use this as a guide to select a level that is comfortable for you.
- ▲ Note : If you change therapy mode/program during the course of a therapy session, the intensity level will reset to "0" showing on the screen, for safety reason.
- 3. Press MODE to save your selection.
- ▲ Note: It is suggested that treatment frequency is 3 times per day



Never set intensity so that the stimulation becomes extremely uncomfortable.

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# **SPECIAL FEATURES**

#### **Treatment Time**

The device offers 12 preset times: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55 and 60 minutes. Time will countdown on the display in 1-minute increments for the duration of your session.

- The device turns off automatically when the therapy time has elapsed.
- The most recently set therapy time is stored.
- If you alter the program mode during your therapy, the therapy time won't restart, unless you reset the therapy time.
- The last treatment program you used will appear on the display, when you turn on the device.
- To change the program, press ON + or OFF repeatedly until the desired program appears on the display.
- Press MODE to save your selection. The program you selected will appear on the display the next time you turn on the program.

#### **Lock Function**

Press and hold the ON + and OFF – keys simultaneously for 1 second to lock/unlock the device. The Lock Function prevents accidental intensity changes when buttons are "bumped".

#### Automatic Shut off

- The device automatically turns off when no button is pressed for 60 seconds.
- The device automatically turns off when the time for your therapy session has elapsed.

#### **Intensity Level Reset**

For your safety and comfort, the intensity level will reset to "0" each time the device turns off and after the therapy session has elapsed.

The treatment will discontinue if the electrodes are not properly placed well, and/or any entry for changing the mode setting during therapy session, it shall initiate to lowest intensity level, showing "0" on the screen.

#### Low Battery Status Indicator

The battery status indicator will light whenever the battery is low. This means that soon you have to replace the batteries.

The batteries should last between 30 and 60 applications depending on stimulation times and frequencies.

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# CARE AND MAINTENANCE

# Stimulator

The stimulator may be wiped clean with a small amount of soapy water on a clean cloth. Do not submerge the stimulator in liquids or expose it to large amounts of water.

- Never use aggressive cleaning products of stiff brushes to clean the device.
- Remove the batter before cleaning the device.
- Do not use the device again until it is completely dry.
- Do not expose the device to direct sunlight and protect it from dirt and moisture.

#### Cables

- Disconnect the cables from the stimulator and electrodes.
- Do not pull on the cables, but on the connectors attached to the ends of the cables.
- Store the stimulator with the cables in a clean, dry place.

#### Electrode

The electrode pads are disposable and use an adhesive that will dry after prolonged usage or storage. Pads should be replaced when they lose their adhesive quality, or you sense a change in stimulation sensation.

If you're in doubt about the integrity of the pads, order fresh pads please order online at www.iReliev.com or contact authorized distributor(s).

#### How to Store Your System

- 1. Store your System at room temperature in a dry place, out of the reach of children.
- 2. If the stimulator will not be used for more than a week, remove the battery from the stimulator.

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# **TROUBLE SHOOTING**

Always check the unit and accessories before use to prevent damage and defects; these are some of the simple checks:

- 1. Make sure the battery has sufficient charge and is not corroded.
- 2. Make sure the cables fit tightly into the connection sockets of the device. The table below shows some common defects. If you cannot remedy the defects as described, contact your unit provider if it is not possible to remedy in the manner described.

Defect	Cause	Remedy
The device does not turn on	No battery or bad battery	Replace battery
The device turns on	Battery not inserted properly	Insert battery again Replace battery
and then off again	Battery life expired	Replace battery
	Cable broken	Replace cable
The device turns on, but does not generate electric pulses	Cable not connected Properly	Connect cable properly
	Treatment time has Expired	Switch unit to the OFF Position and switch back on.
The unit does not turn on even though new batteries have been inserted		Contact your distributor or manufacture Call 1 406.672.6066

# **ET-7070 STIMULATOR TECHNICAL SPECIFICATIONS**

Channel:	Dual, isolated between channels.	
Pulse Amplitude:	Adjustable 0 – 80mA peak into 500 $\Omega$ load each channel;	
RMSV at 3.5 V (max.),	RMSA at 1.3mA (max.)	
Pulse Rate:	As pre-programming operation mode.	
Pulse Width:	As pre-programming operation mode.	
Timer:	5~60 min. selectable.	
LCD:	Shows modes, pulse rate, pulse width, timer, CH1/CH2, intensity level.	
Wave Form:	Symmetrical Bi-Phasic square pulse.	
Max Charge per Pulse:	20.8 micro-coulombs maximum.	
	** All electrical specifications are $\pm 20\%$ at 500 $\Omega$ load.	
Operating Conditions:	+ 50°F (10C°) to +104° (40C°), 40-90% max. Relative humidity	
Transportation & Storage Condition:	+14°F (-10C°) to +140° (60C°), 30-95% max. Relative humidity	
Weight:	75 g (battery included)	
Dimensions:	90 x 52.5x19.38 mm	
Power Source:	3 x AAA / 4.5 Volt batteries	

(i) There are a number of technical symbols on your unit explained as follows:



This symbols means " Serial number "

This symbols means "Attention, consult the accompanying documents"



This symbols means "Manufacturer "



This symbol means type BF equipment; this device offers protection against electrical shock by standard compliance to leakage currents of electrode pad.



This device shall be disposed in accordance with national laws after their useful lives

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(ii) there is a label on the package of electrode that explains as follows:



This symbol means "used before", represent as "YYYY-MM" (for year and month).

# **ET-7070 STIMULATOR TECHNICAL SPECIFICATIONS**

- The device complies with current specifications with regard to electromagnetic compatibility and is suitable for use in all premises, including those designated for private residential purposes. The radio frequency emissions of the device are extremely low and in all probability do not cause any interference with other devices in the proximity.
- It is recommended that you do not place the device on top of or close to other electronic devices. Should you notice any interference with other electrical devices, move the device or connect it to a different socket.
- Radio equipment may affect the operation of this device.

# ELECTROMAGNETIC COMPATIBILITY INFORMATION

Guidance and manufacturer's declaration – electromagnetic emissions			
		ctromagnetic environment specified below. The customer or the user a ssure that it is used in such an environment.	
Emissions	Compliance	Electromagnetic environment - guidance	
RF emissions CISPR 11	Group 1	The ET-7070 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 emissions CISPR 11	Class B	The ET-7070 is suitable for use in all establishments, including	
Harmonic emissions IEC 61000-3-2	Class C	domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Complies	domestic purposes.	

Guidance and manufacturer's declaration – electromagnetic immunity				
The ET-7070 is inte			ironment specified below. The customer or the user used in such an environment.	
Immunity test IEC 60601 test level Compliance level Electromagnetic environment - guidance				
Electrostatic discharge (ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.	
Electrical fast transient/burst IEC 61000-4-4	± 2 kV for power supply lines	± 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) and neutral	± 1 kV line(s) and neutral	Mains power quality should be that of a typical commercial or hospital environment.	

Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5 % UT (>95 % dip in UT) for 0,5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles <5 % UT (>95 % dip in UT) for 5s	<5 % UT (>95 % dip in UT) for 0,5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles <5 % UT (>95 % dip in UT) for 5s	Mains power quality should be that of a typical commercial or hospital environment. If the user of the ET-7070 requires continued operation during power mains interruptions, it is recommended that the ET-7070 be powered from an uninterruptible power supply or a battery.	
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	Not applicable	Not applicable	
NOTE UT is the a.c. mains voltage prior to application of the test level				

	Guidance and manufacturer's declaration – electromagnetic immunity				
	The ET-7070 is intended for use in the electromagnetic environment specified below. The customer or the user of the ET-7070 should assure that it is used in such an environment.				
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms	Portable and mobile RF communications equipment should be used no closer to any part of the ET-7070, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance		
Radiated RF IEC 61000- 4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	$d = 1,2\sqrt{P}$ $d = 1,2\sqrt{P}$ 80 MHz to 800 MHz $d = 2,3\sqrt{P}$ 800 MHz to 2,5 GHz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation Distance in meters (m). 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:		
IOTE 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 ET-7070 is used exceeds the applicable RF compliance level above, the ET-7070 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the ET-7070.

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

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#### Guidance and manufacturer's declaration - electromagnetic immunity

The ET-7070 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the ET-7070 help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the ET-7070 as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of	Separa		ing to frequency of transmitter m
transmitter	150 kHz to 80 MHz $d = 1,2\sqrt{P}$	80 MHz to 800 MHz $d = 1,2\sqrt{P}$	800 MHz to 2.5 GHz $d = 2,3\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer. NOTE 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.

# WARRANTY

The iReliev® Strength & Recovery System, Model no. ET-7070, carries a one-year warranty from the date of purchase.

The warranty does not apply to damage resulting from failure to follow the operating instructions, accidents, abuse, alterations or disassembly by unauthorized individuals.

The warranty applies to the main device and necessary parts and labor relating thereto. Battery, lead wires, electrodes, and other accessories are warranted to be free from defects in workmanship and materials at the time of delivery.

The distributor reserves the right to replace or repair the unit at their discretion.

Contact your distributor or ExcelHealth Inc. Call (406) 672 6066



# ExcelHealth Inc. www.iReliev.com

P.O Box 80907 Billings, MT 59108