

iReliev™

Back Pain Relief System



**Instruction & Operating Manual
Read Before Using**



CE 0120

IMPORTANT INFORMATION

The iReliev® Back Pain Relief System is particularly safe and user-friendly. Please be aware, that the intensity can only be adjusted when the Back Wrap is fastened and the electrode pads are in contact with the skin.

iReliev® Back Pain Relief System Model # ET-9090

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The **iReliev® BACK PAIN RELIEF SYSTEM** has been designed for people who suffer from muscular tension and pain in their back. It provides a drug free alternative that treats back pain, the natural way with no side effects.

Your **iReliev® BACK PAIN RELIEF SYSTEM** is a Transcutaneous Electric Nerve Stimulation (TENS) device. It deliver TENS treatment in the low frequency range. When using this method, subtle electrical pulses are produced onto the skin using two or more electrodes.

This stimulates muscles, nerve fibers and acupuncture meridians in order to activate your body's own pain relief mechanisms.

Chronic pain can be treated with different methods such as medication, injections, surgical procedures or with alternative treatment methods such as acupuncture or TENS.

TENS treatment can block pain signals by interrupting the transmission of impulses through the skin by means of electrical impulses. As a result, the signal interpreted as "pain" is not transmitted to the brain and thus not felt.

Furthermore, it will work with the body's own pain inhibitors; harmless and gentle electric currents from the TENS device stimulate the release of endorphins that function as a pain reducer. The pain is therefore stopped, eased or removed by the body itself.

This electrical stimulation cannot remove the causes of pain or cure a disease, but it could help ease or block pain in the body.

In order to achieve all the benefits from the iReliev® BACK PAIN RELIEF SYSTEM, carefully read the following safety information and warnings before use.

Safety Information

- Use this device only according to its intended purpose as specified in this instruction and operating manual. The warranty will be invalidated if the device is used for other than the intended purpose.
- Do not use the device if it is not operating correctly, or if it has fallen into water or has been damaged.
- Do not attempt to repair the device yourself in the event of a malfunction; this will invalidate the warranty.
- Do not operate this device near high-frequency transmitters, such as microwaves, short wave transmitters or radio transmitters. This may impair the device's ability to function.
- Do not switch the device on until the wrap has been fixed on the body. Do not use the device while taking a bath or a shower.
- Do not use this device while sleeping.
- Do not use this device while driving a car or another kind of vehicle or while operating machinery or heavy equipment.
- Protect the device from moisture. If liquid should get into the device, remove the battery immediately and discontinue use. Should this happen, contact iReliev® at 1-406-672-6066.
- Never use the device in rooms where aerosols (sprays) are used or medical grade oxygen is being administered.
- Do not use with any creams, lotions or gels.
- Do not use with heating pad or any other electrical device.

Battery Safety Information

- Keep away from Children
- Do not recharge
- Do not short-circuit
- Do not throw in a fire
- Please recycle. Do not dispose of old batteries with your household waste.
- Dispose of batteries safely at an acceptable recycling center

Caution, the device should not be used by patients with:

- Pacemakers, defibrillators or extreme cardiac irregularities
- Metal implants or electronic auxiliary devices
- Diabetes or abnormally high blood pressure
- A tendency toward internal bleeding
- Pregnant women

Therapy with the iReliev® BACK PAIN RELIEF SYSTEM is a proven and natural way of fighting pain; however it does not replace medical diagnosis or treatment. If you are not sure, consult your doctor before using this device.

Consult your doctor always before use, if you suffer from epilepsy or certain disabilities. Persons whose sensitivity is disturbed or impaired should only apply this device under supervision of your physician.

Do not use this device if suffering from menstrual pains.

Do not use this device if your skin burns or is numb.

Pain relief treatment following injury or an operation should only be carried out under the careful supervision and instruction of a doctor or physical therapist.

Do not treat parts of the body that are swollen, burned, inflamed, peeling skin, wounds or other sensitive points.

In case of doubt, consult a doctor or medical professional for instructions and guidance.

Keep the unit out of the reach of children.

Treatment should be monitored if used on or near children or persons who are handicapped and only have a limited capability to use this device.

If you feel pain or have an unpleasant feeling, stop treatment and consult your doctor.

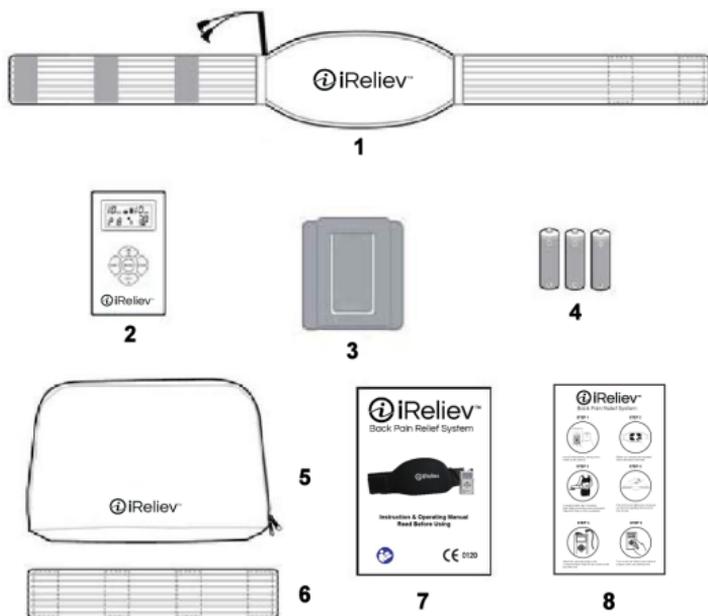
Package Contents

Before using this accessory, make sure that you have all components.

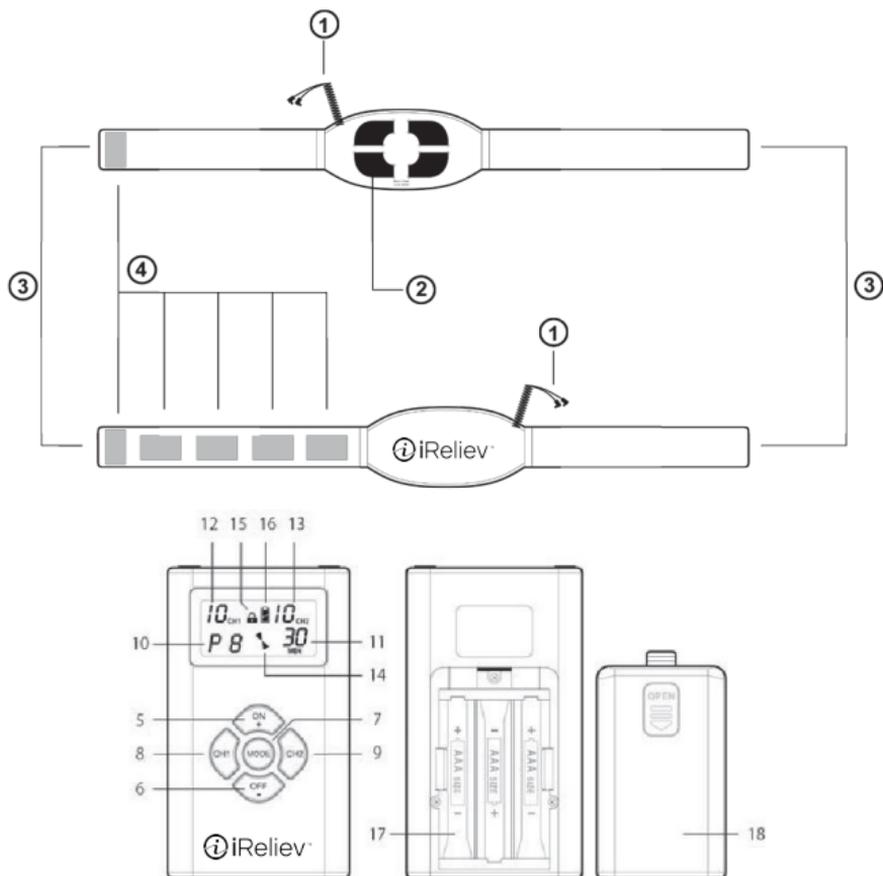
The iReliev® Conductive Back Wrap includes:

1. 1 iReliev® Conductive Back Wrap
2. 1 iReliev® TENS Control Unit
3. 1 Clip Holster
4. 3 AAA Batteries
5. 1 Portable Carrying Case
6. 1 Conductive Back Wrap Extension
7. 1 Operating & Instruction Manual
8. 1 Quick Start Guide

The packaging can be reused or recycled. Please dispose of properly if no longer required. If you notice any damage from shipping, Please contact the store in which you purchased BACK PAIN RELIEF SYSTEM or ExcelHealth Inc. at 406-672-6066

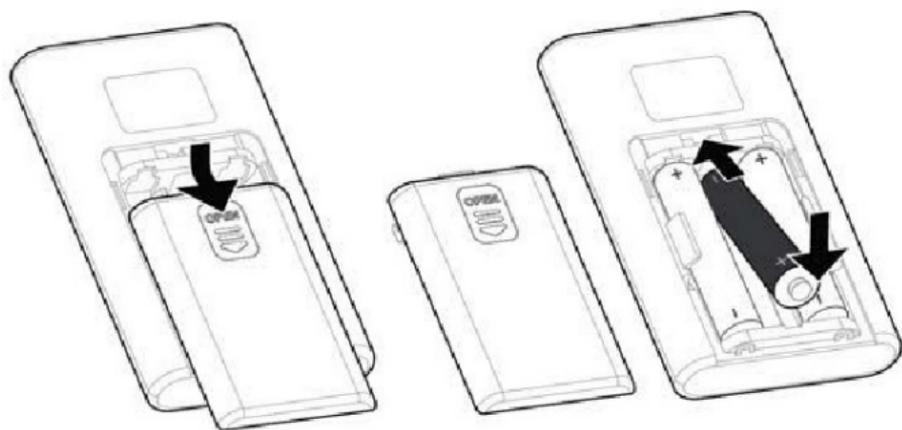


Parts Diagram



- | | |
|---|-------------------------------|
| 1.) Integrated Connection Cables | 10.) Program Number |
| 2.) Conductive Silicone Pads | 11.) Therapy Time Remaining |
| 3.) iReliev™ Conductive Back Wrap | 12.) CH 1 Intensity Level |
| 4.) Hook and Loop Closure | 13.) CH 2 Intensity Level |
| 5.) Power On/Adjust, Increase Key | 14.) Therapy Duration Status |
| 6.) Power Off/Adjust, Decrease Key | 15.) Lock Status Indicator |
| 7.) Program Mode/Therapy Time Selection | 16.) Battery Status Indicator |
| 8.) CH 1 (Channel 1) Key | 17.) Battery Compartment |
| 9.) CH 2 (Channel 2) Key | 18.) Battery Cover |

Inserting/Changing the Batteries

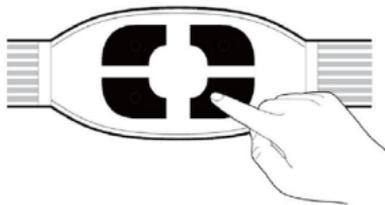


1. Open the battery compartment [17] at the back of the device by pushing the battery cover [18] labeled "Open" downward (this area features raised marks for easy identification).
2. Insert 3 AAA (1.5 V) batteries in the battery compartment; make sure to match up the symbols (+/-).
3. Close the battery 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.

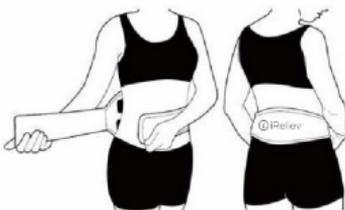
▲NOTE: Always use only 3 x 1.5V (AAA) batteries. Please refer to "Battery Safety Information", for important precautions regarding the batteries.

Putting on the iReliev® Conductive Back Wrap

1. Before putting on the Conductive Back Wrap, remove any residue on skin, cream or ointment. Make sure that your skin is clean and free of oil.
Do not place the wrap on injured or inflamed areas of the skin, such as wounds, sores, rashes or reddening.
2. Before use, dampen the integrated silicon electrodes with water.

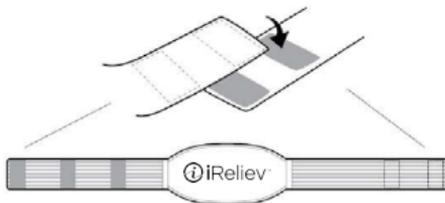


3. Position the electrode pads on the area of the body to be treated. If your back aches at waist level; you are suffering from pain in the upper treatment area. Position the wrap so that the middle of the wrap is at waist level.



4. If your back pain is in the lower treatment area, position the wrap so that the middle of the wrap sits approximately 1 to 2 inches below the waist.
5. When the wrap has been placed into the correct position, bring the two ends of the neoprene straps together and fasten with the built-in hook and loop pads.
6. The wrap may be tightened or loosened as shown by adjusting the hook and loop closure (See diagram below)

▲ NOTE/ CAUTION: Subjective perception of the electric current may alter with changing frequencies or pulse widths. Lower the intensity as soon as the application becomes unpleasant or the pleasant prickling sensation is not felt for a long period of time.



Turning On the Device

1. Press and hold the ON+ button [5]* for two (2) seconds 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 device on until Back Wrap is properly attached.



Turning Off the Device

1. The device turns off automatically after the therapy session time has elapsed.
2. To turn the unit off manually, press the OFF- button [6]* for three (3) seconds. The display will be blank and the device will turn off.

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 device while it is still turned on.



Selecting the Treatment Program Mode

The iReliev stimulator device (Model # ET-9090 and ET-1313) offers eight preset treatment program modes. The programs differ with respect to varying pulse widths and frequencies. The user may choose suitable stimulation mode depending on their personal condition as indicated in the following steps:

1. Start from P1: only change each mode after a couple of seconds after sensing the stimulation of that mode.
 2. Choose the suitable mode in which you feel most comfortable. Set the device on that mode.
 3. In the case you don't feel certain about the appropriate mode, repeat steps 1 & 2.
- ### Selecting the Therapy Intensity Level

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.
2. To increase or decrease 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.

Selecting the Treatment Time

Press MODE [7]*. The preset (default) treatment time will flash on the display.

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.

Press MODE [7]* 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.

Selecting the Therapy Intensity Level

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.

Press MODE to save your selection.

Special Features

Therapy Time

The device offers 12 preset therapy times: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55 and 60 minutes. The therapy 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 used will appear on the display when the device is turned on.
- To change the program, press ON + or OFF – repeatedly until the desired program appears on the display.
- Press MODE to save selection. The program selected will appear on the display the next time you turn on the program.

Lock Function

If you have turned on the device but have not pressed any button for 20 seconds, the device will automatically lock.

Press and hold the ON + and OFF – keys simultaneously for 1 second to unlock the device.

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, including after therapy sessions.

Low Battery Status Indicator

The battery status indicator will light whenever the battery is low. This means the batteries will soon need to be changed.

Care and Maintenance

iReliev® TENS Device:

- The iReliev® stimulator device may be wiped clean with a small amount of soapy water on a clean cloth. Do not submerge the device in liquids or expose to large amounts of water.
- Do not wash the wrap in water. Do not wash the wrap in the washing machine.
- Never use aggressive cleaning products or stiff brushes to clean the device.
- Remove the batteries before cleaning the device.
- Do not use the device again until completely dry.
- Do not expose the device to direct sunlight and protect it from dirt and moisture.

iReliev® Conductive Back Wrap:

- If the wrap has become damp during use, let it dry naturally before using again.
- Do not wash the wrap in water. Do not wash the wrap in the washing machine.
- Lay the wrap out flat or hang it up to dry naturally. Do not tumble dry. The wrap maybe cleaned using a lightly dampened sponge.
- Do not use bleach when washing the wrap.
- Do not dry clean your wrap. Do not dry it over anything hot (e. g. a radiator) as it contains plastic parts. Ensure the wrap is completely dry before using it again. The wrap should never be ironed.
- The lead wire cables are integrated into the wrap. Always detach the TENS unit from the wrap. Do not pull on the lead wire cables but on the connectors attached to the ends of the cables.
- Do not expose the device to direct sunlight and protect it from dirt and moisture.

How to Store your iReliev® System:

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

Disposal

Follow all laws and regulations regarding the proper disposal of batteries and electronic devices that are relevant in your area. Consult your municipal authorities or your iReliev® dealer for information about proper disposal.

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 ExcelHealth or an authorized iReliev® Dealer.

DEFECT	CAUSE	REMEDY
The device does not turn on	No battery or bad battery	Replace batteries
The device turns on and then off again	Battery not inserted properly Battery life expired	Insert battery again Replace battery Contact iReliev Reseller
The device turns on, but does not generate electric pulses	Cable broken Cable not connected properly, Treatment time has expired	Contact Authorized iReliev Reseller Connect cable properly. Switch unit to the OFF position and turn it back on
The unit does not turn on even though new batteries have been inserted		Contact Authorized iReliev Reseller

Use only iReliev® parts. The following iReliev® replacement parts are available:

ET-1515	Conductive Back Wrap
AC-0001	EZ Carry Holster Clip
AC-0005	Carrying Case
CM-5050	Electrode Pads, 2" x 2"
CM-4848	Lead Wires

iReliev™ (Model # ET-9090 and ET-1313) Stimulator Technical Specifications

Channel: Dual, isolated between channels.

Pulse amplitude: Adjustable 0 – 80mA peak into 500Ω load each channel.

Pulse Rate: As pre-programming operation mode.

Pulse Width: As pre-programming operation mode.

Software ramp up feature: Pulse width ramp up when change mode.

Timer: 5~60 min. selectable.

LCD: Show modes, pulse rate, pulse width, timer, CH1/CH2, intensity level.

Program modes:

Program	Max.	Phase duration	Rate	Function mode	Wave form Type
P1	80mA	260uS	15Hz	Constant	A
P2	80mA	260uS	60Hz	Modulated	A
P3	80mA	260uS	60Hz	Constant	A
P4	80mA	260~150uS	2 ~ 60Hz	Modulated	B
P5	80mA	260~150uS	60Hz	Modulated	A
P6	80mA	260uS	7 <->60Hz	Modulated	C
P7	80mA	260~156uS	60Hz	Modulated	A
P8	80mA	P1 ~P7		Cycle	A/B/C

Wave Form: Symmetrical Bi-Phasic square pulse.

Max Charge per Pulse: 20.8 micro-coulombs maximum.

Power Source : 3 x AAA / 4.5 Volt batteries

All electrical specifications are $\pm 20\%$ at 500Ω load.

Description of symbols:

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



This symbol means "Serial number"



This symbol means "Attention" consult the accompanying documents



This symbol means "Manufacturer"



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

(ii) Package of electrode pads are labeled as follows:



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

Electromagnetic Compatibility

- 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		
The ET-9090/ET-1313 is intended for use in the electromagnetic environment specified below. The customer or the user of the ET-9090/ET-1313 should assure that it is used in such an environment.		
Emissions	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 1	The ET-9090/ET-1313 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-9090/ET-1313 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 C	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Complies	

Guidance and manufacturer's declaration – electromagnetic immunity

The ET-9090/ET-1313 is intended for use in the electromagnetic environment specified below. The customer or the user of the ET-9090/ET-1313 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	± 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 % 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 5s	<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 5s	Mains power quality should be that of a typical commercial or hospital environment. If the user of the ET-9090/ET-1313 requires continued operation during power mains interruptions, it is recommended that the ET-9090/ET-1313 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: U_T is the a.c. mains voltage prior to application of the test level

Guidance and manufacturer's declaration – electromagnetic immunity

The ET-9090/ET-1313 is intended for use in the electromagnetic environment specified below. The customer or the user of the ET-9090/ET-1313 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	3 Vrms 150 kHz to 80 MHz	3 Vrms	<p>Portable and mobile RF communications equipment should be used no closer to any part of the ET-9090/ET-1313, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance</p> $d = 1,2\sqrt{P}$ $d = 1,2\sqrt{P} \quad 80 \text{ MHz to } 800 \text{ MHz}$ $d = 2,3\sqrt{P} \quad 800 \text{ MHz to } 2,5 \text{ GHz}$
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms	<p>where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation Distance in metres (m).</p> <p>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, should be less than the compliance level in each frequency range.</p> <p>Interference may occur in the vicinity of equipment marked with the following symbol: </p>

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 ET-9090/ET-1313 is used exceeds the applicable RF compliance level above, the ET-9090/ET-1313 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-9090/ET-1313.

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 communications equipment and the ET-9090/ET-1313

The ET-9090/ET-1313 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the ET-9090/ET-1313 help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the ET-9090/ET-1313 as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter <i>W</i>	Separation distance according to frequency of transmitter <i>m</i>		
	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.

Limited One (1) Year Warranty

This item is warranted to be free of defects in materials or workmanship for (1) year from the date of purchase, provided the product has been used under normal conditions of intended use. If this product is defective, warrantor will replace the product or refund the purchase price of the product at the place of purchase upon presentation of sales receipt and original UPC code from packaging. This warranty extends only to the original purchaser, and excludes any damage to the product resulting from accident, misuse, abuse, damage caused by operation in ways not recommended or authorized by these operating and safety instructions. This warranty is voided if the product is ever used in a commercial or business environment.

There are no warranties beyond this limited warranty. This limited warranty is your complete and exclusive legal means. Warrantor makes no other warranties, express or implied, including but not limited to any implied warranty of merchantability or of fitness for a particular purpose. Warrantor undertakes no responsibility for the quality of the product except as otherwise provided herein. Warrantor assumes no responsibility that the product will be fit for any particular purpose for which you may be buying this product. Warrantor expressly disclaims liability for any special, incidental, indirect, or consequential damages arising out of the purchase or use of this product.

The amount of Warrantor's liability under this warranty is limited to the amount of the original purchase price paid for the product by the original retail purchaser. If Warrantor cannot lawfully disclaim statutory or implied warranties, then all such warranties shall be limited in duration to the duration of this warranty and shall be limited to the amount of the original purchase price paid for the product by the original retail purchaser.

This warranty gives you specific legal rights; you may also have other rights that vary by jurisdiction. This warranty is valid only within the United States of America (USA) and Canada.

Item # ET-9090

Return to:

ExcelHealth Inc.

102 Trewin School Rd.

Park City, MT. 59063

www.iReliev.com

1-406-672-6066

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iReliev™
Back Pain Relief System

**ExcelHealth Inc.
www.iReliev.com**

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