



Product Name: BACKUP BELT

Model Number: 002

Company name: EXPAIN AS

Address: Karl Johans gate 13 0154 Oslo Norway

Contact Name: Thomas Jakobsen

Telephone number: +47 97035997

Fax number: +47 920 40 756

Email: [thomas@expain.no](mailto:thomas@expain.no)

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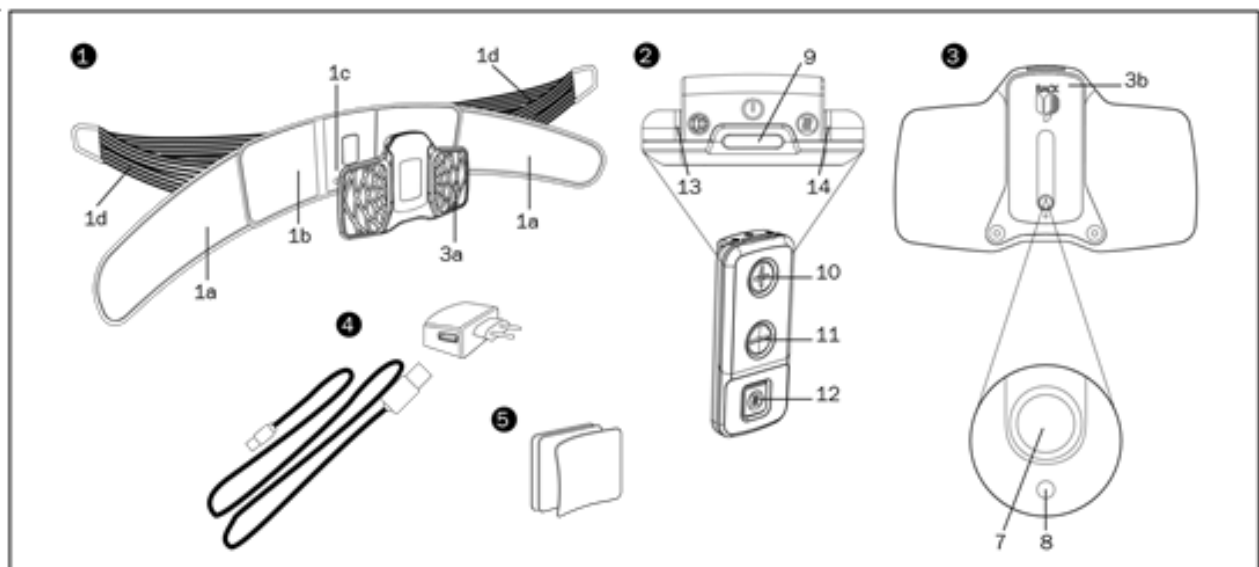
## 1. Parts & Controls

### PARTS

1. Belt
  - a. Inner belts (right & left)
  - b. Belt backplate
  - c. Magnetic connectors
  - d. Tensioning belts (right & left)
2. Remote
3. Main unit
  - a. Electrode Area: Surface where the gel pads are placed
  - b. Electronics housing
4. USB cable & Charger
5. Gel pads
6. Manual

### CONTROLS

7. Main unit On/Off
8. Main unit Indicator Light
9. Remote unit On/Off
10. TENS On/“+” button
11. TENS Off/“-” button
12. HEAT On/Off button
13. TENS signal light
14. HEAT signal light



## 2. Introduction

Congratulations on your purchase of the Backup Belt. It is a unique wireless remote controlled pain relief device incorporating active heating, structural support and TENS technology to

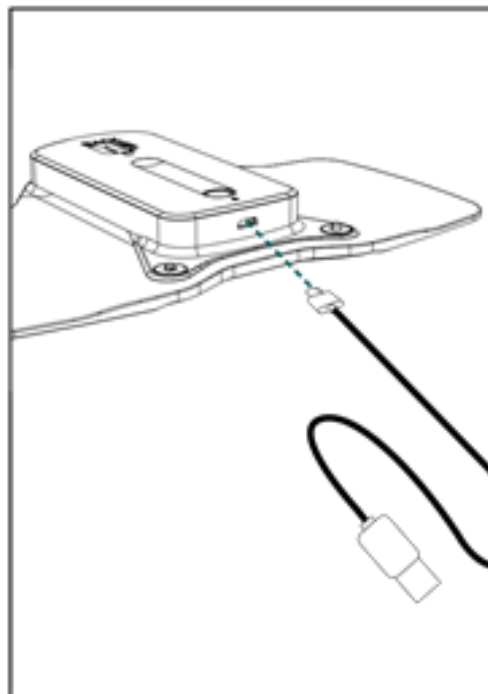
specifically target back pain.

This innovative device is safe, drug-free, easy to use, discreet and comfortable to wear, and most importantly allows you to control your pain to maintain an active lifestyle.

### 3 Before use

Your Backup Belt has been designed with the home user in mind. Please consult the safety precautions and contraindications in this manual prior to use.

Before using the main unit the first time please charge the main unit. Insert the usb cable to the charger. Plug the charger into the mains making sure before that the charger is compatible to the mains in your current location. Then connect the main unit. The main unit indicator light will flash green every 5th second during charging. The unit is fully charged after 2 hrs (2000 mAh).

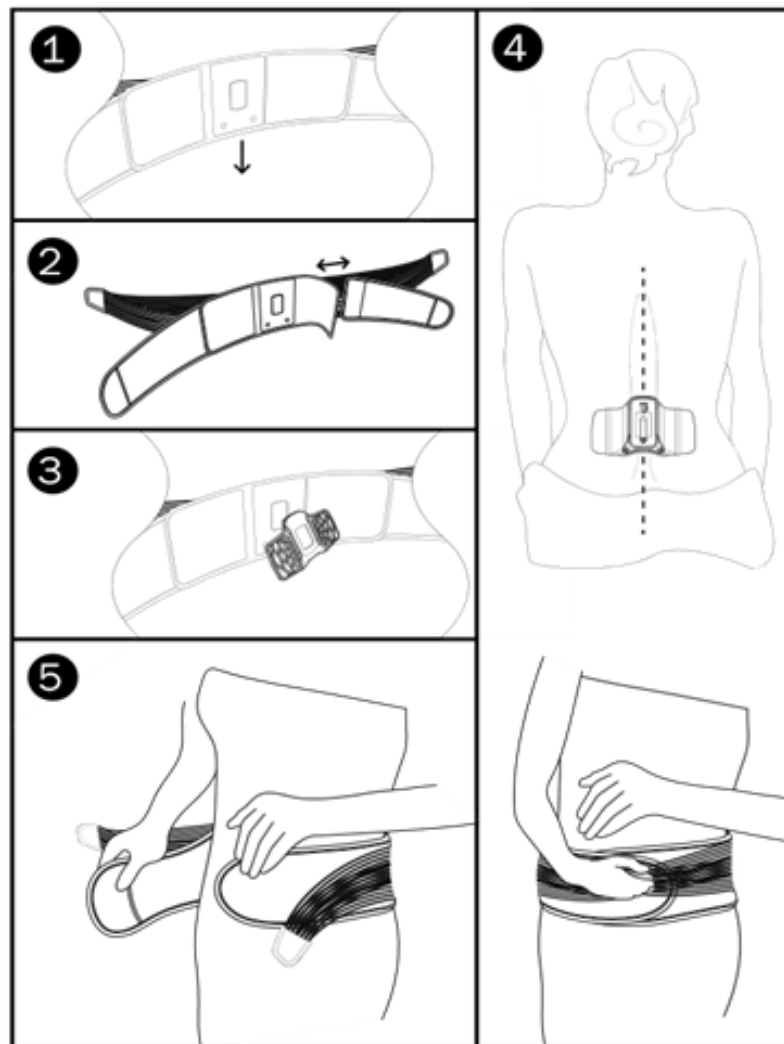


### 4 Support functionality

The support function of your Backup Belt is completely analog and ready to use. Put on the belt like this:

1. Make sure the belt is facing the right way. The magnetic connectors should face towards your body and down
2. The belt length can be adjusted by moving the inner right & left belt along the belt backplate, fastening by means of the velcro.
3. To insert the main unit insert the notch in the top of the main unit into the matching tab on the belt backplate. Then press main unit through the opening allowing the magnetic connectors on the main unit & belt backplate to connect.

4. Hold the backplate with main unit towards your lower back. If using the gel pads see next page for detailed instructions. Grab the inner fastening belt and wrap it around your body. Tighten comfortably and fasten with the Velcro. Right hand side goes over the left hand side.
5. To tighten the supporting belt grab both outer tensioning belts and pull them until you feel you have desired support. Fasten with the Velcro. Right hand side goes over the left hand side here too.



## 5 TENS functionality

Before using the TENS functionality of your Backup Belt you will need to apply the gel pads to the main unit, Insert the main unit in the belt and prepare the device for a treatment.

### APPLYING THE GEL PADS TO THE MAIN UNIT

The gel pads are intended for single person use. They will last, depending on skin type, oils, and pH levels, approximately two to five applications. Replace the gel pads when they no longer adhere completely. Follow these steps to apply the gel pads:

1. Trim, not shave, excessive hair on the treatment area.
2. Wash the skin and dry completely
3. Separate the two gel pads.
4. Remove the film with print reading "ELECTRODE" from the side being applied to the electrode area. This film is the smallest of the two. Do not remove the protective liner on the "skin side" yet.
5. Align the shape of the first gel pad with the electrode area. Apply the gel pad onto the electrode area and firmly press across the entire surface to ensure good adhesion.
6. Repeat steps 3 – 5 for the second gel pad.

#### HOW DOES IT WORK

Tens treatment works in two ways. It stimulates nerves that normally carries pain signals thus "blocking" these ("closing the pain gate"). It also releases endorphins as if from exercise, endorphins is the body's "natural pain killers".

#### TREATMENT RECOMMENDATIONS

- You can leave the device in position for multiple treatments during the day. It will automatically turn Off after one (1) hour of treatment. If no treatment is active the unit will turn off completely after 15 minutes.
- It is recommended you wait a minimum of 30 minutes between treatments.

#### CONDUCTING A TENS TREATMENT

Always read the safety warnings before conducting a treatment. Follow these steps to conduct a treatment:

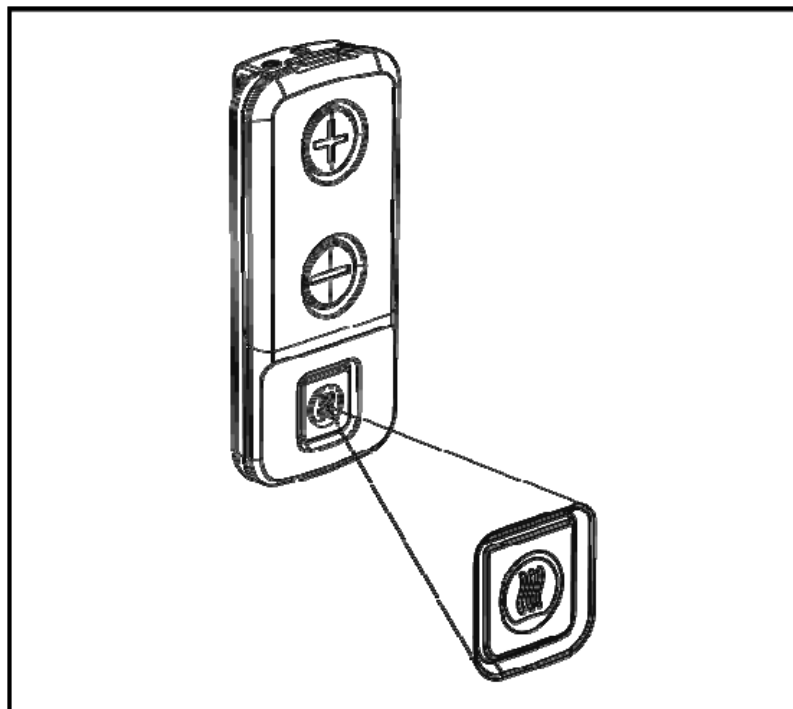
1. Remove the protective liners from the "skin side" of the gel pads by slowly peeling the liner diagonally from an inside corner to the opposite outside corner. **Important! Avoid contact of the gel pad with other objects. Contact with other objects may affect the pads adhesion properties. Save the liners for storage of the device.**
2. Align the center of the device over the spine and place the device on your back in the area of pain. If you cannot place the device properly, ask another person for assistance. **Important! Do not apply the gel pads/electrodes directly over the spine.**
3. Press the On/Off button on the main unit. The LED will flash green for 10 seconds indicating the device is ready for use.
4. Press the ON/OFF button on the remote. Both signal lights will blink twice to signal remote is on. Then press the "+" button on the remote control to begin the treatment. The TENS signal light on the remote will blink once to indicate signal is sent from remote. **Note: The LED on the main unit will flash blue for 10 seconds to indicate TENS treatment is activated.**
5. Press the (+/-) buttons to increase or decrease the intensity of the stimulation until it is at a comfortable level. There are 4 levels.
6. Press the ON/OFF button on the remote control to stop the treatment at any time. Both indicator lights will blink twice to signal remote is off. Treatment will automatically stop after 1 hour of inactivity (not pressing any buttons) - Alternatively press the "-" button several times to reduce intensity and finally turn off the treatment.

Note: If a treatment is stopped and restarted the treatment will restart at the first stage, and will run for a new full hour. Note: Turning the remote off will also turn the main unit off! To resume treatment both main unit & remote must be turned back on separately.

## 6 HEAT functionality

### CONDUCTING A HEAT TREATMENT

1. Press the HEAT button on the remote. The heat signal light on the remote will blink once to show that a signal is sent to the main unit.
2. The belt will start the heating and last for 20 minutes before automatically turning off. The main unit indicator light will blink yellow for 10 seconds to indicate a heat treatment has started. The heating temperature is 42°C. It will take a bit of time before you can feel the heat after activation. The unit will have enough battery for 8 full HEAT treatments per full charge.
3. To stop the HEAT treatment before the 20 minutes have passed simply press the HEAT button on the remote one more time. Alternatively press and hold the remote ON/OFF button to turn off both remote and main unit instantly.



## 7 Removing the Backup Belt

1. After treatment, or when you want to remove the device, loosen the support belt, grasp the edge of the device and gel pad to ensure the gel pad does not stay on the skin. Slowly peel the device away from the skin.
2. Align, and place the protective liners back on the gel pads. Ensure the pads are completely covered. **Important! Do not remove the device until tens treatment has stopped.**

## 8 Batteries & charging

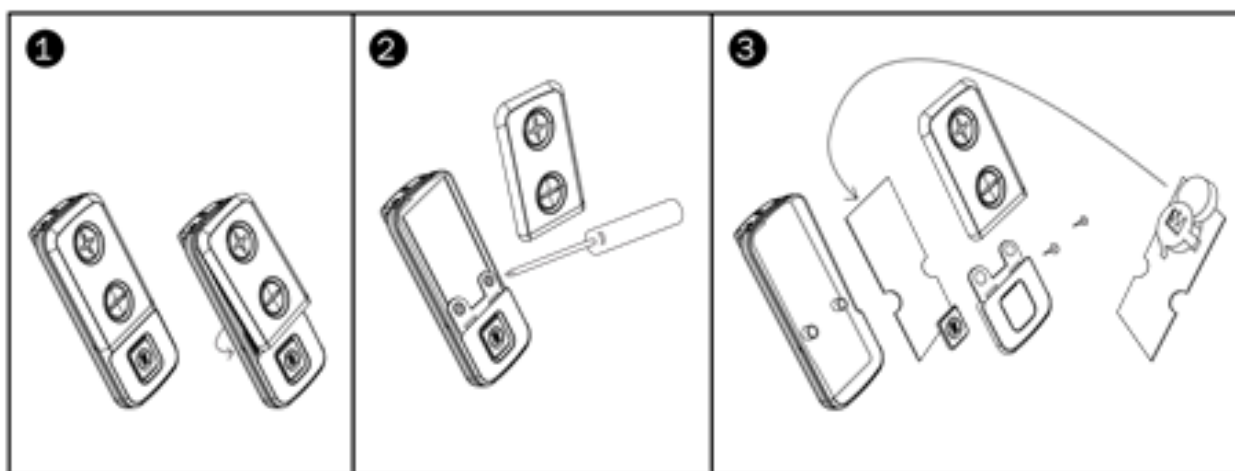
When main unit recharge is needed the main unit indicator will flash red: Recharge with USB charger.

When the remote control is low on battery no indications will light up if buttons are pressed.

### To REPLACE THE REMOTE CONTROL BATTERY:

1. Gently snap off the front cover where the “+” & “—” buttons are, you will then see 2 screws.
2. Unscrew these with included screwdriver to access the battery on the back of the PCB.
3. Slide the old battery out, and slide a new(1)CR2016E lithium battery into the slot. **Note: The (+) is facing upward**

Reverse the process to close the remote.



## 9 Maintenance and storage

- Clean the device using a damp cloth and mild soap. Gently wipe clean.
- The right & left inner belts can be washed at 30 degrees. Do NOT wash the belt backplate as it contains electronics for the heating functionality.
- Do not submerge the product in liquid.
- The device should be operated, transported and stored at temperatures between 10° C and 40° C, with relative humidity between 30% - 85%, and Atmospheric Pressure limitation of 500 hPa to 1060 hPa.

All values have +/- 10% tolerance.

- Store the device, remote control and gel pads in the original packaging when not in use.
- If the device is not working properly, stop using immediately. Do not disassemble or modify the device. Contact Unikia Customer Service at [post@unikia.com](mailto:post@unikia.com)



## 10 Technical Specifications

### Technical specifications

Channels: Single channel

Waveform: Asymmetric biphasic square pulse

Pulse Amplitude: 0 ~110 mA = 0 ~ 55 volts, adjustable (at 500 ohm load)

Pulse Frequency: (Hz) 5-120

Pulse Width: (µs) 120 - 240

Timer Control: (mins) 20 mins for heat, 60 mins for tens

Power Supply: Lithium-polxmer rechargeable battery

Remote Control: One (1) CR2016E Lithium battery

Size (D x W x H): 18 mm x 191 mm x 90 mm

Weight (including battery): Mainunit 200g, remote 17g

Safety Standards: CE, R&TTE, EN300220-2, EN301489-3

EMC: EN60601-1

Safety: EN60601-1-2

Made in China

### WARRANTY

COMPANY SHALL NOT BE LIABLE IN ANY EVENT FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Unikia ("Company") warrants the Backup Belt ("Product") is free of defects in materials and workmanship. This warranty shall remain in effect as per the legislation of the country in which the unit was purchased.

## 11 Safety information

### INDICATIONS FOR USE

*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.*

**SAFETY CONTRAINDICATIONS** *Do not use the TENS treatment on this device if you have a cardiac pacemaker, implanted defibrillator, or other implanted metallic or electronic device. Such use could cause electric shock, burns, or electrical interference or death.*

## WARNING!

- *The device's TENS treatment may cause rhythmic disturbances to the heart. Do not use the device across or through your chest. If you are susceptible to rhythm disturbances of the heart, use of the device must be done under the direction of a physician.*
- *Use of the device's TENS treatment over your neck could cause muscle spasms resulting in airway closure, difficulty in breathing, adverse effects on heart rhythm or blood pressure. Do not use the device's TENS treatment over your neck*
- *Use of the device's TENS treatment when you are in the care of a physician or have had medical or physical treatment for your pain.*

*Consult with your physician before using the device's TENS treatment.*

- *Continued use of the device's TENS treatment when pain does not improve, becomes more severe, or lasts more than five days may indicate a severe condition. Stop using the device's TENS treatment and consult with your physician.*
- *Use of the device's TENS treatment on the following skin conditions may cause a condition to become worse. Do not use the device's TENS treatment over, or in proximity to, these skin conditions: abnormal skin, skin that is not intact, uncleaned, unhealthy, open wounds, rashes, swollen, red, infected, inflamed areas, skin eruptions (e.g., phlebitis, thrombophlebitis, varicose veins), or cancerous lesions.*
- *Electrical stimulation during common activities may increase the risk of injury. Do not use the device's TENS treatment when in the bath or shower, sleeping, driving, operating of machinery or any activity in which electrical stimulation can put you at risk of injury.*
- *Using the device around electronic monitoring equipment (e.g., cardiac monitors, ECG alarms) may cause equipment malfunction. Do not use this device around electronic monitoring equipment.*
- *The effect, and safety, of using the device on children, during pregnancy, or use across the head has not been evaluated or established and is unknown. Do not use the device on children or let children handle the device. Do not use this device if you are pregnant, or suspect that you are pregnant, unless under the direction of your physician. Do not apply the device across your head.*

## PRECAUTION

- *Using the device's TENS treatment when you have suspected or diagnosed epilepsy or heart disease may cause unexpected reactions. Always consult your physician before using the device's TENS treatment.*

## 12. Manufacturers Declaration


GUIDANCE AND MANUFACTURER'S DECLARATION – ELECTROMAGNETIC EMISSIONS		
The Backup Belt is intended for use in the electromagnetic environment specified below.		
Emissions test	Compliance	Electromagnetic environment – guidance
RF emissions CISPR 11	Group 1	The Backup Belt 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	
Harmonic emissions IEC 61000-3-2	Not applicable	
Voltage fluctuations / flicker emissions IEC 61000-3-3	Not applicable	The Backup Belt are suitable for use in all establishments including domestic and those directly connected to the public lowvoltage power supply network that supplies buildings used for domestic purposes.

GUIDANCE AND MANUFACTURER'S DECLARATION – ELECTROMAGNETIC IMMUNITY			
The Backup Belt is intended for use in the electromagnetic environment specified below. The customer or the user of the Backup Belt should assure that it is used in such an environment.			
	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 ±1 kV for input/ output lines	±2 kV for power supply lines ±1 kV for input/ output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV differential mode	±1 kV differential mode	Mains power quality should be that of a typical commercial or hospital

	±2 kV common mode	±2 kV common mode	environment.
<b>Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-11</b>	$<5\% U_T$ (>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 Backup Belt requires continued operation during power mains interruptions, it is recommended that the Backup Belt be powered from an uninterruptible power supply or a battery.

#### GUIDANCE AND MANUFACTURER'S DECLARATION – ELECTROMAGNETIC IMMUNITY

The Backup Belt is intended for use in the electromagnetic environment specified below. The customer or the user of the Backup Belt should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment– guidance
<b>Conducted RF IEC 61000-4-6</b> <b>Radiated RF IEC 61000-4-3</b>	3 Vrms 150 kHz to 80 MHz 3 V/m 80 MHz to 2.5 GHz	3 Vrms 150 kHz to 80 MHz 3 V/m 80 MHz to 2.5 GHz	<p>Portable and mobile RF communications equipment should be used no closer to any part of the Backup Belt, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance</p> $d = 1.17 \sqrt{P} \quad 150 \text{ kHz to } 80 \text{ MHz} \quad   \quad d = 1.17 \sqrt{P} \quad 80 \text{ MHz to } 800 \text{ MHz} \quad   \quad d = 2.33 \sqrt{P} \quad 800 \text{ MHz to } 2.5 \text{ GHz}$ <p>where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m).</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>

<p><b>NOTE 1</b> At 80 MHz and 800 MHz, the higher frequency range applies.</p> <p><b>NOTE 2</b> These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.</p> <p>*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 Backup Belt is used exceeds the applicable RF compliance level above, the Backup Belt should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the Backup Belt .</p> <p>** Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.</p>			

#### RECOMMENDED SEPARATION DISTANCES BETWEEN PORTABLE AND MOBILE RF COMMUNICATIONS EQUIPMENT AND THE BACKUP RELIEF BELT

Recommended separation distances between portable and mobile RF communications equipment and the Backup Belt.

	Separation distance according to frequency of transmitter m		
Rated maximum output power of transmitter W	kHz to 80 MHzd =1.17√P	MHz to 800 MHzd =1.17√P	MHz to 2.5 GHzd =2.33√P
0.01	0.12	0.12	0.23
0.1	0.37	0.37	0.74
1	1.17	1.17	2.33
10	3.70	3.70	7.37
100	11.70	11.70	23.30

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

**NOTE 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, object.

- **FCC Caution**
- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- **Note:** 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.
- Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.