

TensCare
Limited

TouchTENS

Model: XL-Y1

Instructions For Use



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TensCare TouchTENS (Model: XL-Y1)
Instructions For Use

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1. INTRODUCTION



This symbol on the unit means 'Refer to Instruction Manual'.

TENS can be used to treat arthritis, back pain, incontinence, lumbago, menstrual pain, Multiple Sclerosis pain, nausea, phantom-limb pain, post-shingles pain, sciatica, sports injury pain, and many other conditions.

TENS can also be used to alleviate stress, tension, insomnia and travel sickness.



This sign indicates the presence of a hazard that can cause personal injury if the hazard is not avoided.



This sign indicates the presence of a hazard that might cause damage to the **Touch TENS** machine, or to the leads of electrodes attached to it, if the hazard is not avoided.



This sign indicates the provision of additional information.

2. CAUTIONS & WARNINGS



Do not use TENS :

- if you have a heart pacemaker or have a heart rhythm problem
- if you have, or have had, epilepsy
- during the first three months of pregnancy
- when cycling, driving or operating machinery
- if you are suffering from acute, feverish or infectious diseases
- near heart monitors or alarms
- to mask or relieve undiagnosed pain



Do not place electrodes in these places:

- on the carotid arteries in the front of your neck
- over your eyes
- across the front of the head
- on the abdomen if you are pregnant
- on the heads of children under 12
- near malignant tumours



Do not start your TENS treatment until the cause and source of pain has been diagnosed by a medical practitioner.

If you are in any doubt about any of these warnings, you **MUST** consult your medical adviser.

3 SIDE EFFECTS

There are no known side effects to TENS use and long-term TENS use is not harmful.

4 COMPLICATIONS

These can arise but are very rare.
The following points are worth noting:



Do not-

- ignore any allergic reaction to the electrodes:
If a skin irritation develops, discontinue use and consult a doctor or medical professional
- apply electrodes to broken skin.
- apply electrodes to skin which does not have normal sensation. If the skin is numb, too great an intensity may be used, possibly resulting in a minor burn.

5. GENERAL PRECAUTIONS



Do not-

- immerse your TENS unit in water or place it close to excessive heat
- attempt to open up the TENS unit. There are no user-serviceable parts inside.
- use rechargeable batteries, as the voltage is insufficient.
- mix old and new batteries. Be sure to dispose of old batteries safely



Do-

- remove batteries from your TENS machine if the unit is unlikely to be used for a long period

6. CONTENTS

Your TouchTENS pack should contain the following:

- 1 x TouchTENS XL-Y1 Pain Relief Unit
- 1 x removable Belt Clip
- 2 x Lead wires
- 1 x bag of Self-adhesive Electrodes
- 2 x AA 1.5v (Type LR6) batteries
- 1 x Instruction Guide (this booklet)

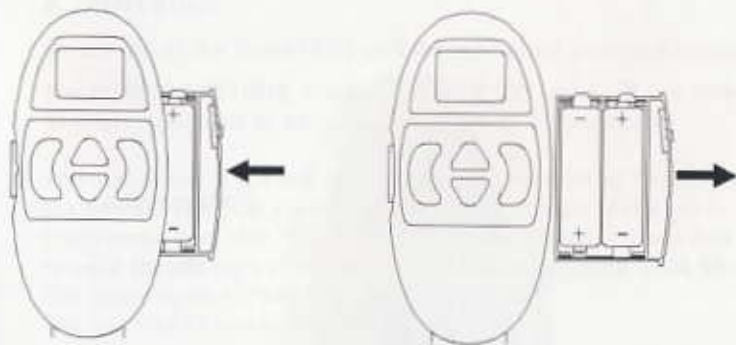
Having checked all the contents are correct, please proceed to assemble the unit.

7. ASSEMBLY

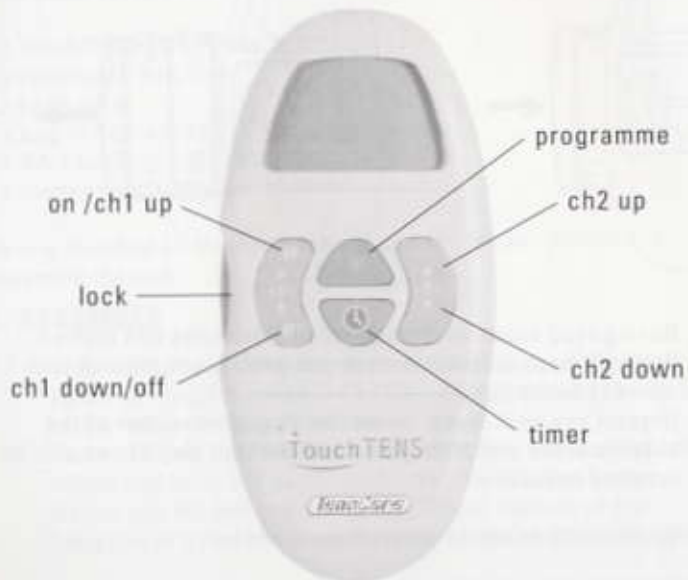
- 7.1** Slide the battery compartment catch and remove the battery holder. A diagram inside the battery compartment shows how to insert the batteries correctly. Insert the two 1.5V AA (Type LR6) batteries. Replace the battery holder and slide the catch shut. Use only alkaline batteries. Do not mix old and new batteries. Do not dispose of the batteries in a fire and keep them out of the reach of children



Ensure unit is switched OFF



- 7.2** Having read about the Placement of Electrodes and studied the body maps, decide whether you wish to use the unit with one or two leads. Unravel one/both leads. Insert the plug(s) into either of the sockets in the end of the unit. Note that the plug(s) can only be inserted one way.
- 7.3** See Para 11 on which programme to chose.
- 7.4** See para 15 on how to connect and apply the electrodes.



TensCare TouchTens XL-Y1

8. CONTROLS

On the top of the TouchTENS unit there are four coloured buttons:

The **PURPLE BUTTONS**, marked On/▲, ▼/Off and ▲, ▼ are intensity controls. Use them to adjust the strength of the sensation.

The first press of the left-hand purple button, marked On/Up, switches the unit on. The LCD shows that the unit is automatically set in Programme A at zero intensity. To increase intensity, press and release the top part of the two purple buttons marked On/▲ and ▲. The intensity levels are indicated on the LCD. The unit has 15 levels of intensity.

You may feel nothing over the first few presses. Continue pressing until the sensation is strong but comfortable. Further increases during use may be necessary if your body becomes used to the sensation. To lower the intensity, press and release the lower part of the purple buttons marked ▼/Off and ▼.

To turn the unit off, press and release the left-hand purple button until the LCD screen displays 0, any further press will switch the unit off. Alternatively, hold down the left hand purple ▼/Off button for 3 secs.



SAFETY FEATURE If the unit is turned On and the intensity level is not increased above 0 for 5 minutes, it will turn Off automatically.

The **YELLOW BUTTON**, marked #, is the Programme control. The TouchTens has seven different and specially developed programmes lettered A-G. When the unit is first switched on/ for the first time it automatically enters **PROGRAMME A**. Each time the **YELLOW BUTTON** is pressed and released, the programme changes and the letter is shown on the LCD. Each time the programme is changed, the intensity level reverts back to zero. This is a safety feature to alleviate any sudden feeling of a surge, as each Programme gives a different sensation.

The **GREEN BUTTON**, marked with a clock symbol, can be used to set the session duration. When the unit is switched on it is automatically set at continuous, (displayed as **CO**) which means that the unit will continue functioning until it is switched off manually. A session time of 20,40, and 60 minutes can be set by pressing the yellow button repeatedly. The LCD shows the session duration next to the clock symbol. The unit automatically counts down the minutes set and switches off when this reaches zero.

A **LOW BATTERY** display, with a symbol of empty batteries, will show when you need to change the batteries.

The **LOCK BUTTON** on the left side of the unit, marked with a key symbol, can be used to block the control buttons to avoid the controls being altered accidentally. Once the unit has been set at the desired levels press and hold down the button for 3 seconds, at which point a

key symbol will appear on the LCD. The controls can be unblocked by pressing and holding down the button again for 3 seconds.

MEMORY

The TouchTens has a Memory with three functions:

Programme Retention:

When the unit is switched On, it will automatically start in the Programme which was being used when it was switched Off.

Frequency of Use:

Press Programme and Left Purple UP together and hold down for 3 seconds. The display will show T (for no. of Times) and a number from 1 to 99, indicating the number of times the unit has been used. Press the same buttons again to return to normal controls.

Elapsed Time:

Press Programme and Right Purple UP together and hold down for 3 seconds. The display will show U (for Usage) and a number from 1 to 99 hours, indicating the total number of hours the unit has been above zero intensity. Press the Programme button again to return to normal controls.

Reset:

To reset Memory to zero, hold down the Programme and Timer buttons together for 3 seconds.

9. HOW TENS WORKS

TENS stands for Transcutaneous Electrical Nerve Stimulation.

TENS is recommended throughout the world by pain clinics and physiotherapy departments. Not only does TENS reduce your pain, it can also help you to reduce your need for painkillers. TENS is simply a means of stimulating your body's own natural defences against pain.

The electrode pads are usually placed near the source of the pain. Your TENS unit sends a very small electric current through the skin. This stimulates the sensory nerves, which carry touch and temperature signals. These nerves go to the same connections in the spine as the nerves carrying pain. A strong sensory signal will replace the pain signal travelling up the spine to the brain. This is known as the "Pain Gate".

In the Pain Gate mode TENS provides relief while it is switched on. The tingling/pins and needles sensation that you experience competes with the painful signals. The effect may start to wear off after 1-2 hours. You can stop for an hour and then try again. You can use TENS several times a day.

At low Pulse Rate settings, TENS causes a release of endorphins, the body's natural morphine-like substances, which relaxes and relieves your pain.

In Endorphin Release mode, the relief builds up over as much as 40 minutes, and can last for up to 4 hours after the unit is turned off.

Most people will achieve a reduction in pain. Some find that their pain goes away completely while they are using TENS. Some users only feel better after repeated use, and over a long time period.

10. WHAT THE PROGRAMMES DO

The Touch Tens has carefully-chosen pre-set pain-suppression programmes and is particularly easy to use. Each programme has its own combination of Pulse Rate and Pulse Width and each will feel different and suppress pain in different ways.

Pulse Rate

A medium Pulse Rate of 110 Hz is good at blocking pain signals from reaching the brain.

A low Pulse Rate of 4 or 10 Hz is good for the release of endorphins, the body's natural morphine-like substances, but tends to be less comfortable

Burst Mode

Burst Mode combines Medium and Low Pulse Rate effects.

Pulse Width

The TouchTENS has programmes at Low and Medium Pulse Width. With a Medium Pulse Width, the TENS signal is more likely to stimulate a sensory nerve near the electrode, but it is also more likely to stimulate a motor nerve controlling a muscle.

Modulation

During the treatment session your body will gradually acclimatise to the TENS signal and both the tingling sensation you feel and the pain relief you obtain will become less strong. This is normal. One solution is to increase the stimulation by turning up the intensity. However, the intensity should not be set too high as muscle contraction and even pain can result.

Another way to extend the length of your treatment session is to select a different mode. The TouchTENS has two Modulation programmes. These are designed to resist accommodation by continuously changing either the frequency or the intensity.

11. WHICH PROGRAMME SHOULD I USE?

If your physician recommends no particular settings, you should experiment to establish which programs give you the most pain relief.

It is important to test the different programmes available on your unit

because they produce pain relief by different methods. The most appropriate programme varies from one person to another even if they have the same type of pain. Therefore, the selection of both the programme and positioning of the electrodes should be performed on an individual basis. This section provides guidelines on where to start and the main differences between the modes available on your unit.



When you have found the programme which suits you best, the TouchTENS will remember it, and automatically use it next time you switch on.

Programme A – Medium Rate, Low Pulse Width, Pain Gate

If you are using a TENS unit for the first time, it is recommended that you start with A. Most people find the tingling/pins and needles sensation produced by this programme more comfortable than some of the other programmes. For this reason the unit automatically goes to Programme A when first switched on.

The intensity should be increased slowly until a strong but comfortable level of sensation is reached.



Remember that you will have to increase the intensity during the treatment to keep the sensation constant as the body gets used to the feeling.

Programme E – Medium Rate, Medium Pulse Width, Pain Gate

This is similar to A, but has deeper penetration and a stronger feel. It is more likely to produce muscle contractions at a lower intensity.

Programme F – Medium rate, Medium Width, Intensity Modulation

This is similar to E, but continuously varies the intensity below the point which you have set.

Programme B – Low rate, Medium Width, Endorphin Release

produces a pulsing or tapping sensation associated with muscle contractions. It is desirable that you experience a muscle contraction with this programme, therefore the intensity should be increased and maintained at a level that just produces muscle activity.

Programme C – Burst, Combined Pain Gate and Endorphin

If you find the muscle contractions with programme B uncomfortable, switch to C. In programme C the stimulus is delivered in bursts, i.e. a group of pulses rather than a single pulse. You will get muscle activity at a lower intensity and thus you may find it more comfortable. If you are using programmes that produce muscle twitches, it is recommended that you also keep your first treatment short (approximately 20 minutes) to see how you respond. You can then increase subsequent treatment periods but limited to a maximum of 40 minutes at a time to avoid muscle fatigue.

Programme D – Low Rate, Medium Width, Endorphin Release

Is similar to B, but has a Rate specifically recommended for nausea, travel sickness and morning sickness (see body map for position of electrodes).

Programme G – Rate Modulation, Pain Gate

If you find that the benefits of programmes A, E & F wear off quite quickly, you can use G. This steps through a range of Rates.

Starting at Pulsing/Tapping it changes every 3 minutes to finish at Tingling/Pins&Needles. The complete program takes 21 min, after which it will repeat.

The continuous change prevents your body getting used to the treatment, and may extend the length of the effect.

SUMMARY

MODE	SENSATION	USE FOR...	METHOD
A	Tingling/Pins & Needles	Most types of acute and chronic pain	Pain Gate
B	Pulsing & Tapping	Chronic pains such as backpain, arthritis, rheumatism, but not for traumatised muscles	Endorphin
C	Pulsing & Tapping	Chronic pains such as backpain, arthritis, rheumatism but not for traumatised muscles	Pain gate & Endorphin
D	Pulsing & Tapping	Chronic pain, nausea, travel sickness, and morning sickness but not for traumatised muscles	Endorphin+ Special
E	Tingling/Pins & Needles	Most types of acute and chronic pain	Pain Gate
F	Tingling/Pins & Needles	Most types of acute and chronic pain	Pain Gate
G	Starts as Pulsing, progresses to Tingling	Most types of acute and chronic pain	Pain gate & Endorphin



Chronic Pain is pain that continues or recurs over a prolonged period. Acute Pain is severe pain following an accident, trauma or surgery.

12. HOW LONG AND OFTEN SHOULD I USE TENS ?

You can use TENS as much, and as often, as you get relief from it. Even continuous treatment is fine, but electrodes should be repositioned regularly (at least every 12 hours) to allow the skin to be exposed to air.

The Endorphin Release programme works better when the intensity is high enough to cause small muscle contractions. After about 20 minutes with muscle contractions, the muscle may begin to ache. If this happens you should stop the session. However, best results with endorphin release are achieved at between 20 and 40 minutes.

Where no muscle contractions occur, sessions should be at least 20 minutes

After your treatment is finished, you may feel a tingling/pins and needles sensation or alternatively your skin may feel numb; this is normal.

13. POSITIONING THE ELECTRODES

Electrodes are usually first placed where the greatest pain is felt or, on (major) acupuncture points. Try different positions until you find the best for you.

The Body Maps show where first to place the electrodes for a range of common complaints.

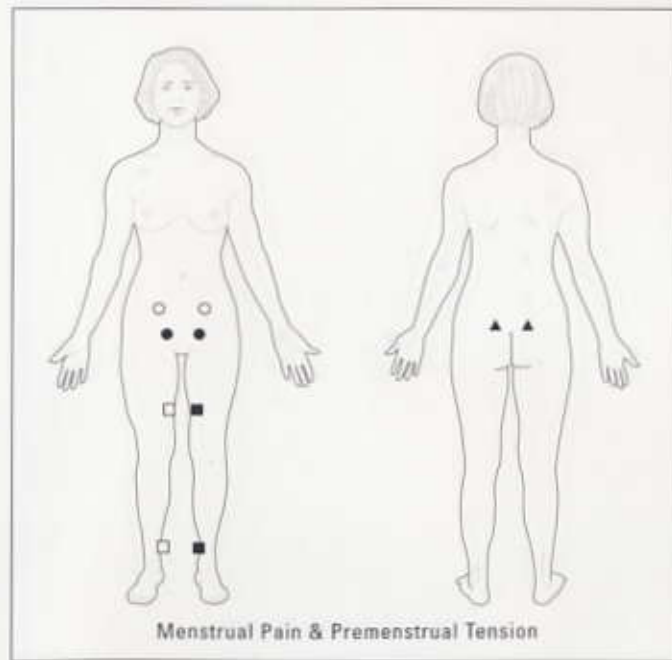
The symbols are paired, for example ●●.

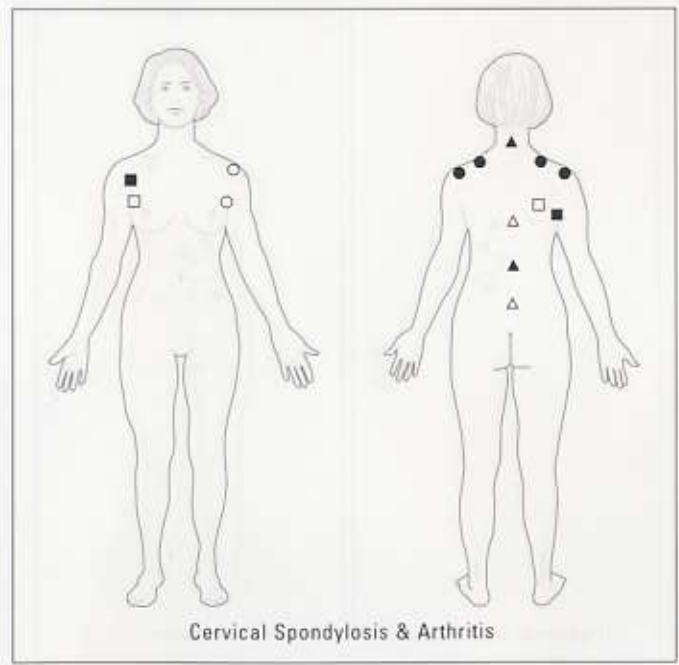
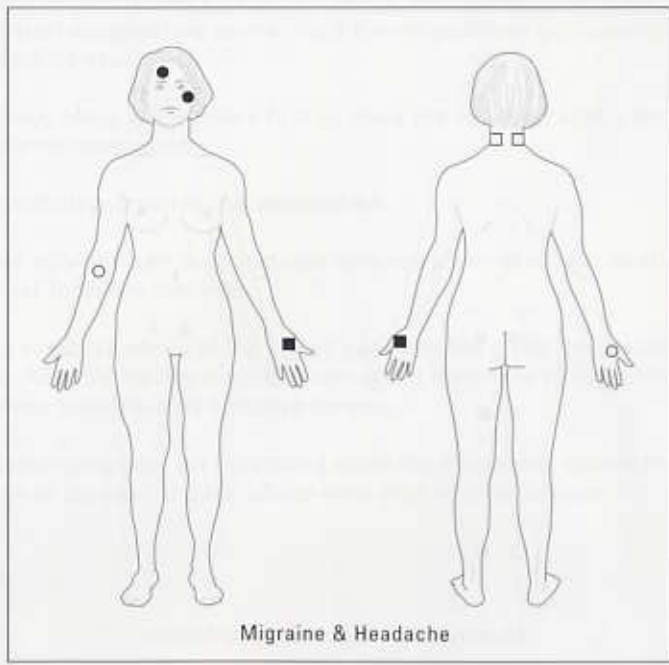
Where only one pair is shown, use only one channel of your dual-channel TensCare machine.

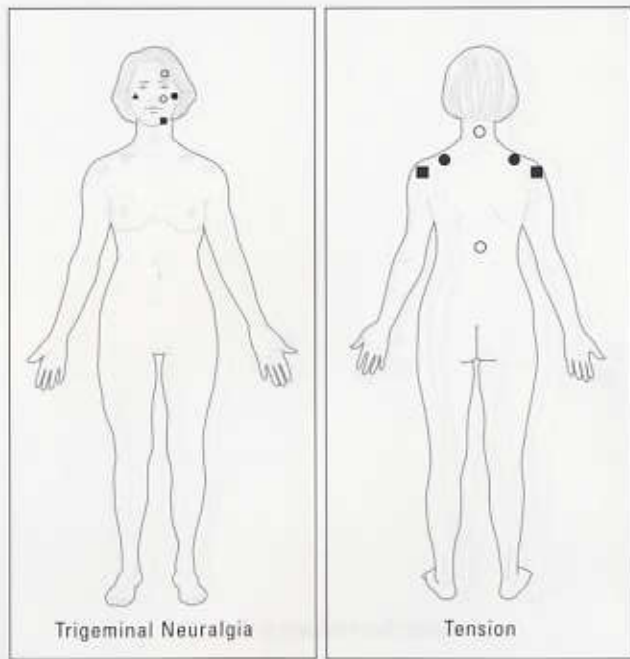
Try to establish which of the paired positions bring you the greatest relief. Also, try moving the electrodes short distances to establish the positions that are most effective for you.

For those symptoms not illustrated apply the electrodes around the source of the pain or seek advice from your medical adviser.

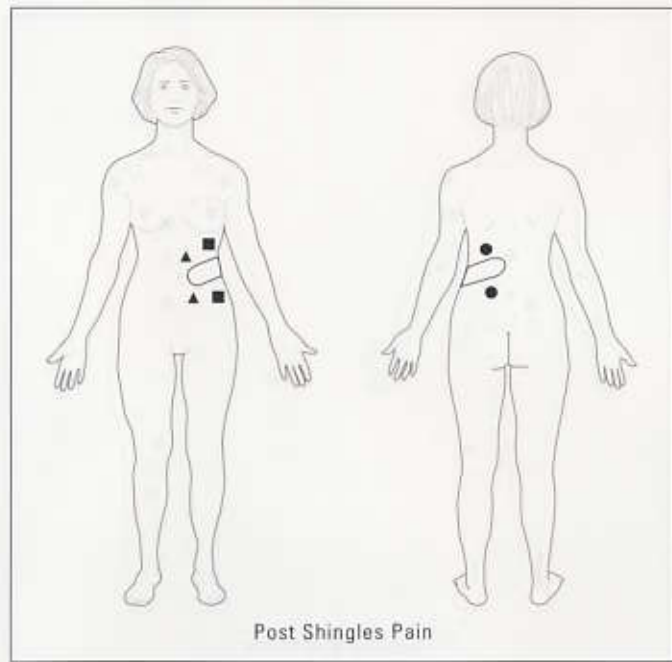
13. BODY MAPS

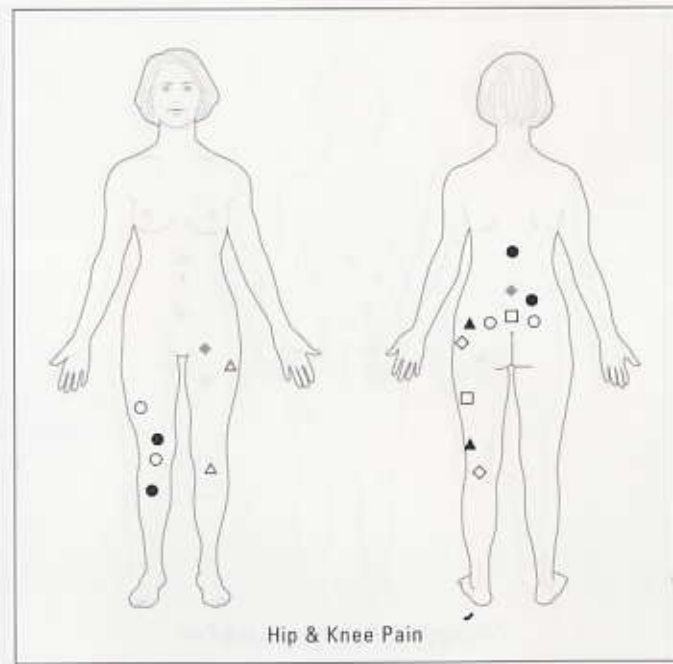
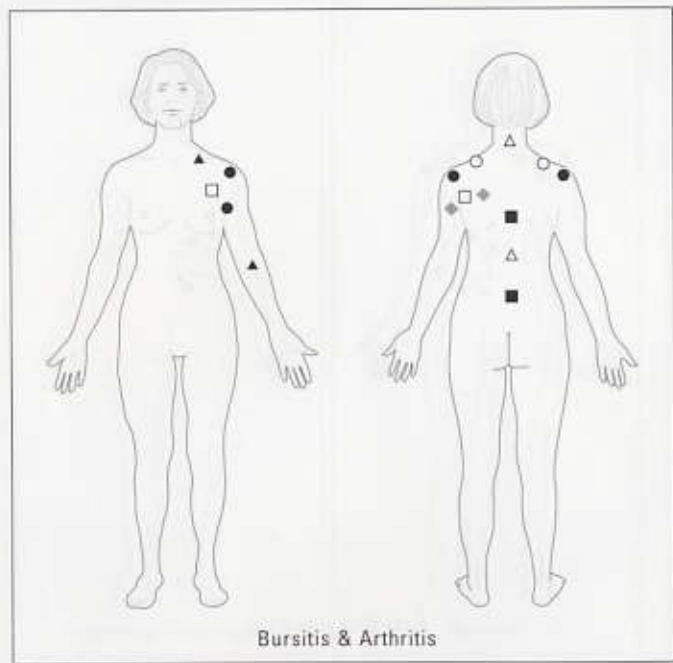


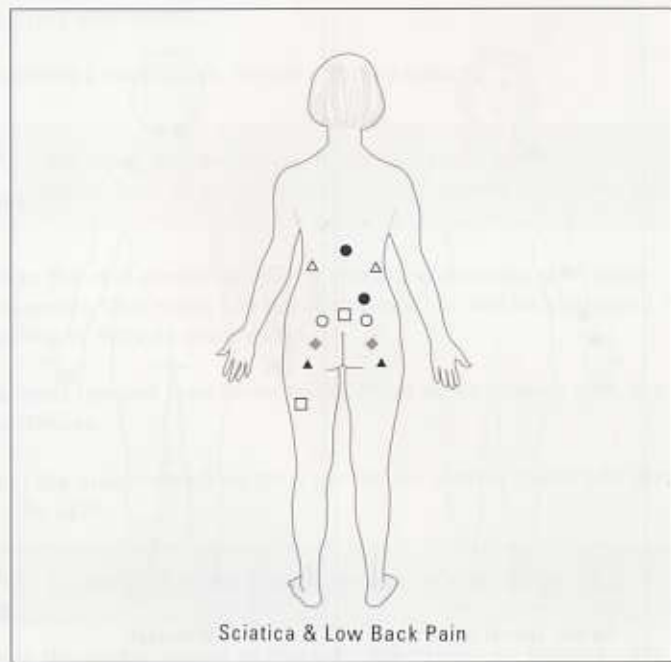
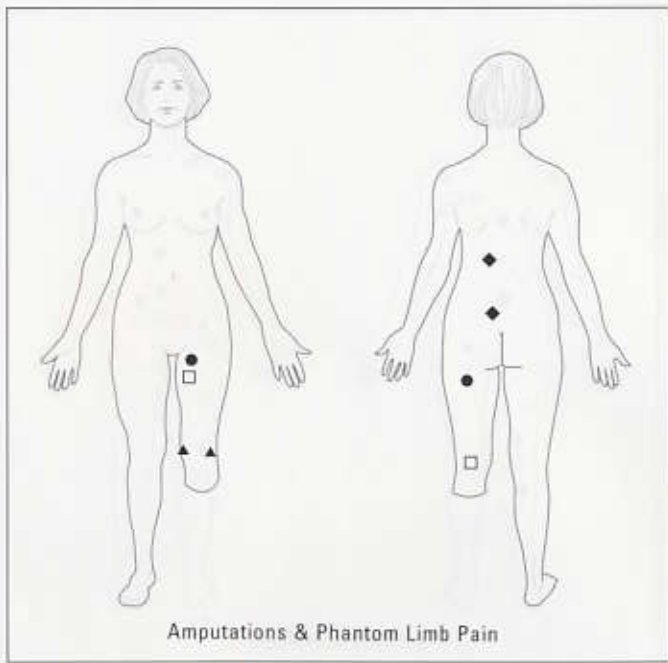


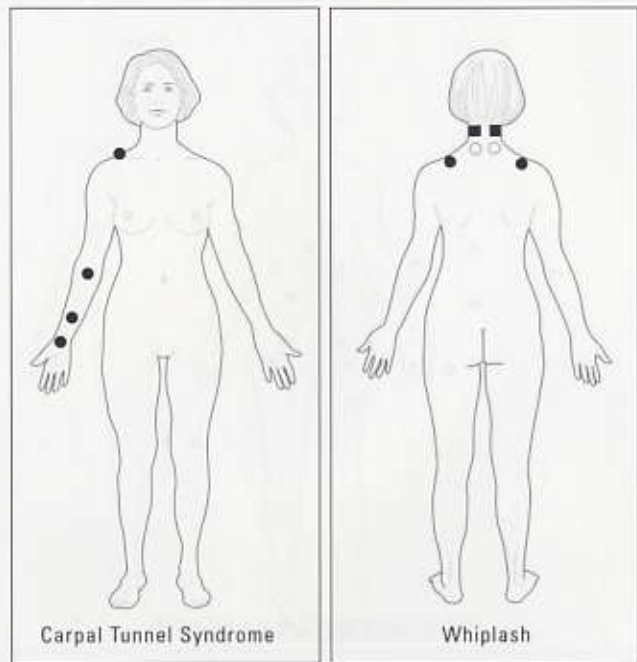


- Use this position, with one of the other three









15. APPLYING THE ELECTRODES

- Switch off BOTH channels (if more than one in your unit) before applying electrodes.
- Electrodes should only be used by one person.



Gel pads **must** be moist. If the gel is allowed to dry out a minor burn might occur (Section 12 covers electrode care).

- Clean the skin where you will place the electrodes with soap and water, then rinse and dry. Electrode life will be shortened if applied to dirty or greasy skin.
- Connect the unit lead wires to the short wires coming from the electrodes.
- Peel the electrodes from their protective plastic shield and place on the skin.



Do **not** pull on the electrode wire as this can break it.

- Keep the plastic shield to store the electrodes on between use.

16. REMOVAL AND STORAGE OF ELECTRODES



Turn off the TENS unit before removing the electrodes.



Do not peel off by pulling on the electrode wire as this can break the wire.

Storage

Electrodes are water-based and may dry out. Between uses they should be stored on the plastic shield in their resealable bag and kept in a cool place out of direct sunlight.

Dried-out electrodes

If the electrode gel becomes dry, either spray the gel with a fine mist of water, or apply a drop of water to the gel and spread around with fingertip. Leave the electrode for about 10 minutes until it recovers its tackiness.

Over-wet electrodes

If the electrode gel becomes too soft and sticky, place the electrode in a refrigerator for a few hours, sticky side up.



Electrode life

The life of an electrode varies depending on skin conditions and skin preparation. Electrodes should last about 30 applications.

17. TREATMENT SESSION EVALUATION

You can expect a significant reduction in pain while you are using TENS. Some people obtain complete pain relief during treatment while a very small number do not derive benefit. If TENS does not seem to work for you, try moving one or both electrodes or varying the settings, or refer back to your medical practitioner.

To use your TENS unit as effectively as possible it is useful to assess your pain level. At the end of each session note down the machine's settings, the session duration and the electrode positions. Finally, rate the degree of pain reduction achieved during the session with a number between 10 (= total pain suppression) and 0 (= no pain relief).

Keeping a record will help you to get the best out of your TENS unit.

18. CLEANING

The case and lead wires can be cleaned by wiping with a damp cloth and a solution of mild soap and water. Wipe dry.



Do not immerse your TENS machine in water.
Do not use any other cleaning solution than soap and water.

19. PROBLEMS?

If your TENS machine is not working properly the problem is often due to the battery or the leads.

Check:

- Are the batteries new?
- Are they installed correctly?
- Are all contacts touching?
- Are the contacts clean of corrosion?
- Are the lead wires properly connected at both ends?
- Have you applied both electrodes (per lead wire) to ensure a complete circuit?

If the above review has failed to resolve your problem, call **TensCare** or your local dealer (address on back cover) for advice.

20. GUARANTEE

Your **TensCare** device is fully guaranteed for two years from the date of purchase. If a fault develops return the unit to TensCare at the address on the back, together with a copy of your invoice and details of the problem.

Please note that the Guarantee is invalidated if incorrect batteries have been fitted in the unit or if the unit has been immersed in water, maltreated or tampered with. Leads, electrodes, gel pads and batteries are not covered by guarantee.

21. CONSUMABLES AND SERVICING


Replacement electrodes, new batteries and lead wires are available from your supplier or distributor (see back cover for contact details), by mail order from **TensCare**, by telephone using a credit or debit card, or through our website. (www.tenscare.co.uk)

Accessories/Spares

The following replacement parts may be ordered from **Tenscare**

Electrodes:	Part No CM5050
Patient Lead:	Part No L-BPT
Batteries:	Part No AA

22. TECHNICAL SPECIFICATION

Waveform	Symmetrical Square Bi-Phasic
Amplitude (over 500 ohm load)	70mA zero to peak
Output plugs	Fully shielded: touch proof
Voltage	240v peak
Channels	Dual Channel
Batteries	2 x AA Alkaline (Two AA batteries)
Weight	80 gms without batteries
Dimensions	115 x 53 x 27 mm
Safety Classification	Internal power source. Type BF Designed for continuous use. No special moisture protection.
Environmental Specifications: Operating: Storage:	Temperature range: 0 to 35°C Humidity: 20 to 65% RH Temperature range: 0 to 55°C Humidity: 10 to 90% RH
TYPE BF EQUIPMENT 	Equipment providing a degree of protection against electric shock, with isolated applied part.

PROGRAMME

Display	Mode	Frequency	Pulse Width
A	Continuous	110Hz	50µs
B	Continuous	4Hz	200µs
C	Burst	Freq within burst = 100Hz Repetition Freq of bursts = 2Hz	200µs
D	Continuous	10Hz	200µs
E	Continuous	110Hz	200µs
*F	Intensity Modulation	110Hz	200µs
*G	Frequency Modulation	2Hz, 10Hz, 50Hz, 80Hz 90Hz, 110Hz	200µs

- * F – The user increases the intensity to the desired level in the first 7 seconds. After 7 seconds the intensity drops down 90% over a period of 6 seconds and then gradually starts increasing again to the original setting over a period of 6 seconds.

- * **G** – The frequency starts at 2Hz and after every 3 minutes shifts to the next frequency setting. After 21 minutes it completes the cycle at 200Hz and then returns back to 2 Hz to repeat the cycle over again.



The electrical specifications are nominal and subject to variation from the listed values due to normal production tolerances

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Distributor of
TensCare Tens machines,
consumables such as electrodes and batteries,
and spares such as replacement lead wires



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