

PhysiPod

BY PROFESSIONALS FOR PROFESSIONALS



AH-TU4

User Manual

AH-TU4

Patient Name:

Preset Program Number:

Settings:

Treatment Time:

Notes:

AH-TU4 USER MANUAL

Read this manual carefully and completely before using the AH-TU4 TENS/NMES and follow the instructions of your doctor or medical practitioner.

Chapter 1. Safety information, maintenance and defects	3
1.1 Use of the device	3
1.2 Precautions	3
1.3 Indications	3
1.4 Contra-indications	3
1.5 Warning	3
1.6 Maintenance	4
1.7 What to do in case of a defect	4
Chapter 2. The AH-TU4 stimulator	5
2.1 General	5
2.2 Controls explanation	6
2.3 Button Explanation	6
2.3.1 On / Off	6
2.3.2 Program buttons	6
2.3.3 CH+/CH- and ▼/▲ buttons	6
2.4 Battery compartment	6
2.5 The display	7
Chapter 3. Getting Started	8
3.1 Cleaning the skin	8
3.2 Placement of electrodes	8
3.3 Setting up the stimulator	8
3.4 Treatment period	9
3.5 Stopping your daily treatment	9
3.6 Removing the electrodes	9
3.7 Taking care of your skin	9
3.7.1 Irritation of the skin	9
Chapter 4. Advanced options and setup possibilities	10
4.0 Buzzer	10
4.1 Default timer	10
4.2 Programs in the unit	10
4.2.1 Preset program table	10-11
4.3 Setup and advanced options	11
4.3.1 Shared functions all modes	11
Chapter 5. Accessories	12
5.1 Cables	12
5.2 Batteries	12
5.3 Treating the irritated skin	12
5.4 Disposable electrodes	12
Chapter 6. Contents of package	12
Chapter 7. Technical information	13
Electrode Placement Diagram	14
Example Electrode Positions	15
Company Contact Information	16

Chapter 1. Safety information, maintenance and defects

1.1 Use of the device

The AH-TU4 is a 4 channel external stimulator used for the treatment of chronic and acute pain. The AH-TU4 is also equipped with a neuromuscular component for different muscle re-education treatments. Do not use the nerve stimulator for purposes other than those instructed by your treating physician or medical practitioner.

1.2 Precautions

- Avoid dropping or damaging the unit as this may cause it to malfunction.
- Check the stimulator and supplied cables for any damage before use.
- Do not use the AH-TU4 while driving or operating heavy machinery.
- Always switch off the stimulator *before* removing or placing electrodes on the skin.

1.3 Indications

TENS/NMES may be used for the following conditions.

TENS is used for:

- Symptomatic relief and management of chronic and intractable pain.
- Adjunctive treatment in the management of post-surgical and post-traumatic acute pain conditions.

NMES is used for:

- Prevention of disuse atrophy
- Relaxation of muscle spasms
- Increasing or maintaining range of motion
- Re-education of muscles
- Increases local blood circulation
- Prevention of venous thrombosis through post-surgical stimulation of calf muscles

1.4 Contraindications – (Caution)

- Do not use this device if you use a cardiac demand pacemaker
- Do not use this device if you have any form of cancer
- Do not apply current over the carotid sinus (neck) region
- Do not apply electrodes so that current flows transcranially (through the head)
- Do not use this unit if pain syndromes are undiagnosed, until etiology is established

1.5 Warning

- The functioning of some electronic monitors, i.e. ECG equipment, could possibly be disrupted when the AH-TU4 is activated.
- Never use the stimulator for purposes not described in this manual or not recommended by your healthcare professional.
- Always keep the stimulator out of reach of children.
- Only use the stimulator on the recommendation of a medical professional, never allow others to use your AH-TU4.
- Do not place electrodes on damaged or irritated skin.
- Do not use electrodes with a smaller surface than 2 inches.
- Irritation of the skin is possible and can be caused by “Lengthy” use of small electrodes and/or an electric current that is too high.

1.6 Maintenance

The AH-TU4 stimulator requires little or no maintenance. If needed, clean the device with a damp cloth. Never use aggressive detergents like ether, alcohol or abrasives.

- Never submerge the device under water or in any other liquid. Should it become wet, have the device checked by the manufacturer or distributor.
- The manufacturer advises a technical check up of the device every 5 years.
- Clean the cables with a damp cloth. The use of aggressive detergents is not advised.
- Store the nerve stimulator and its accessories in the original case.
- Remove the batteries from the device if you do not intend to use it for an extended period of time.
- If the batteries are low an indicator [] is visible in the top right hand side of the LCD screen. The batteries will need to be replaced.
- The AH-TU4 comes equipped with 4 regular alkaline AAA batteries.

Please note the following points when using rechargeable batteries:

- Rechargeable batteries are sensitive to over-charging. Do not overcharge.
- Rechargeable batteries have an electric discharge rate that strongly depends on the temperature of the environment. Keep out of extreme conditions.
- New rechargeable batteries occasionally need a few charging cycles in order to reach their optimal capacity.
- Rechargeable batteries must be charged at least once per 6 months.
- The average life expectancy of rechargeable batteries is usually 500 charging-cycles, but this strongly depends on its use. The total capacity of the battery will slowly decrease after multiple charging-cycles.

1.7 What to do in case of a defect

Repairs, expansions or alterations to your AH-TU4 stimulator should only be done by the manufacturer or distributor. Call PhysiPod on 03 9366 6611.

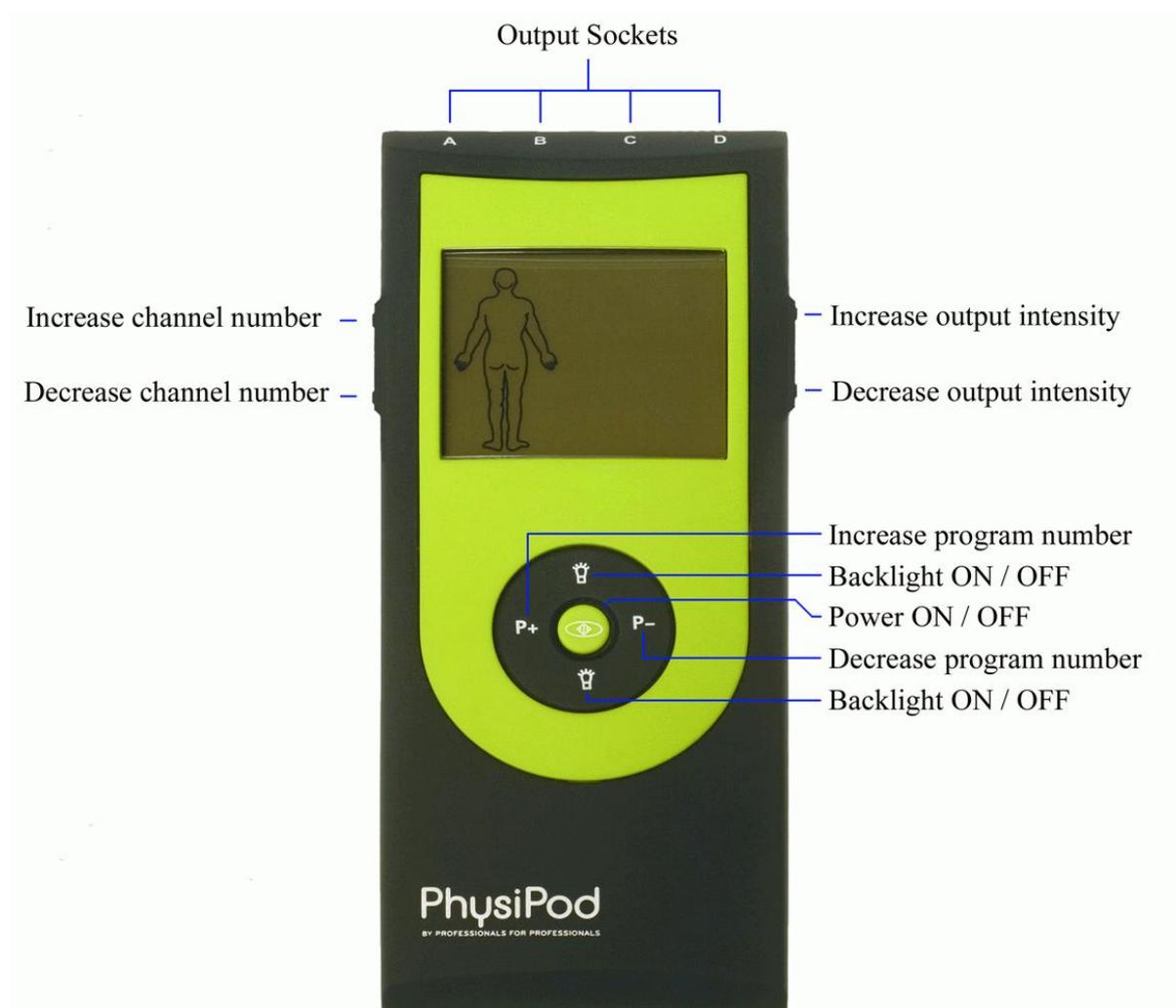
Chapter 2. The AH-TU4 electrical stimulator

2.1 General

The AH-TU4 is a four channel nerve stimulator. This unit has 42 preset programmes. There are four output channels on the top of the device. The output intensity of each channel can be adjusted independently of each other. You can use one, two, three, or four channels as required. If no button is pressed within 3 minutes while in standby mode, the unit will turn off automatically.

2.2 Controls Explanation

All programs or settings are selectable and controllable by pressing these buttons. Programs, intensities and other settings will be visible in the display.



2.3 Buttons Explanation

2.3.1 On and Off

If the unit is off press the [⊕] button to turn the device on and enter the standby mode. Your AH-TU4 will beep twice and turn on.

If the unit is on press the [⊖] button to turn the device off. Your AH-TU4 will beep once and turn off

For safety and prevention of accidental increases of output to this device the AH-TU4 locks after 30 seconds of use. You must select the channel you want to change with the side buttons before you can increase or decrease the intensity of the AH-TU4. You can quickly reset the device at any time by pressing the [⊕] button, which resets the timer to the start time and reduces all outputs to 0.

2.3.2 Program buttons

The [P+] and [P-] buttons scroll through the programs (program 1 - program 42) one at a time. For a list of all the programs refer to section 4.2 of this manual.

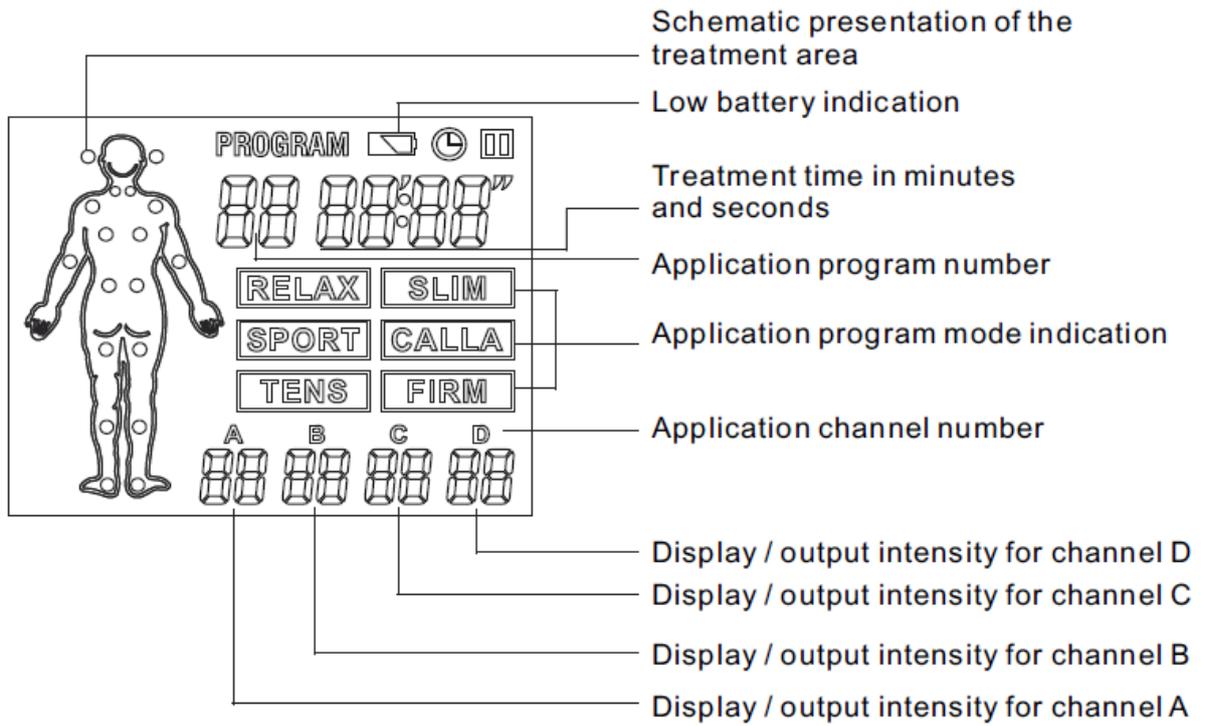
2.3.3 CH+/CH- and ▼/▲ buttons

Pressing these buttons while in standby mode allows you to adjust the intensity by 1 mA each step (range from 0mA to 60mA). The buttons [CH+] / [CH-] on the left hand side of the device select the channel to be changed. The buttons [▼]/[▲] on the right-hand side of the device control the intensity.

2.4 Battery compartment

The battery compartment is on the rear of the unit, press and slide down to release. Take care to insert batteries correctly to maintain correct polarity and avoid damaging the unit.

2.5 The display



Chapter 3. Getting Started

3.1 Cleaning the skin

It is important to take proper care to your skin. Cleaning your skin properly will ensure the best possible contact with the electrodes and will help prevent irritation to the skin. It is recommended that you remove all body hair where the electrodes are to be placed. Failure to remove hair may impair good contact with the skin. Hair removal will also facilitate easy removal of the electrodes.

3.2 Placement of electrodes

Caution.

*The body diagram on the LCD is a very general in nature and should **NOT** be used as a guide on how to place electrodes on your body. Follow the instructions of your doctor or medical specialist on where to place the electrodes.*

Follow all of the care instructions included with this manual for trouble free electrode usage.

3.3 Setting up the stimulator

After the electrodes are placed properly, you can activate the device, and select the desired therapy. The device starts up with the last used program. Select the program(s) recommended by your health care professional. In 4.1 of this manual you will find a summary of the standard programs.

Each time you press the [P+] button the unit will go to the next program. If you press the [P-] button the unit will go to the previous program

After you have selected the desired program, you can set up its intensity. See section 2.3.2 on page 6 for instructions. If the electrodes are not attached to your skin, the intensity level will only advance to a maximum of 9 and then reset itself to 0. If so, check to see if the cables and electrodes are connected properly.

For details concerning treatment mode, please see section 4.2 in this manual.

3.4 Treatment period

You should strictly adhere to the instructions of your doctor or specialist. If you need a longer treatment period, you should first discuss this with your doctor or specialist before changing your program. The stimulator you are using has been programmed to a default treatment time and will turn off automatically after treatment.

3.5 Stopping your daily treatment

Once you have started a program the timer will count down and the AH-TU4 will switch off automatically after your treatment is complete. You can pause your treatment at any time by pressing either the [P+] or [P-] button. To continue your treatment from where you paused it press either the [P+] or [P-] button. You can also end the program manually by pressing the [⊖] button or turning down the stimulation until it reaches 0. When the stimulation current reaches 0 the device will stop and enter into standby mode.

3.6 Removing the electrodes

Caution
Always switch off the device before removing the electrodes.

3.7 Taking care of your skin

After you have removed the electrodes, carefully clean your skin with a mild soap. After the skin is cleaned, a red mark from the patches and/or electrodes may be visible on the skin. This is a normal reaction and usually disappears quickly (may take 30 – 60 minutes on some people).

3.7.1 Irritation of the skin

Despite all the precautions, it is still possible that you may experience skin irritations. Many skin creams take good care of your skin, but are, unfortunately, not compatible with electrical stimulation therapy. Most skin creams are oily or greasy and impair the flow of the current onto your skin. We advise you to use a special TENS/NMES cream, which does not contain any oils or perfumes. This cream is especially designed for this kind of stimulation and does not impair it in any way. If you experience persistent irritation of your skin when using the nerve stimulator, please contact your healthcare professional.

Chapter 4. Advanced options

4.0 Buzzer

The AH-TU4 will beep with each button press. When turning the unit on there will be two beeps and when turning the off there will be a single beep.

4.1 Default timer

The therapy time is set by the manufacturer and cannot be altered by the user. To extend the time the program can be stated again or turned off if a shorter time is required.

4.2 Programs in the unit

There are 42 preset programs in the AH-TU4. The preset programs are displayed on the LCD as a number under the word PROGRAM.

4.2.1 Program table (P1 – P42)

PROGRAM	FUNCTION	ELECTRODE POSITION	USE
1	Relaxation	All treatment areas	To decrease and relax muscle tension and help eliminate toxins from the muscles.
2	Sport	Chest	To prevent muscle atrophy. To increase muscle strength, conditioning, and endurance.
3		Abdominal	
4		Buttock	
5		Leg	
6	Strength (Level 1)	Arm	To increase muscle strength and performance.
7		Chest	
8		Abdominal	
9		Buttock	
10		Leg	
11		Chest	
12	Abdominal		
13	Strength (Level 2)	Arm	To improve muscle strength, conditioning, and endurance.
14		Chest	
15		Abdominal	
16		Buttock	
17		Leg	
18		Chest	
19	Abdominal		
20	Pain Relief (TENS)	All treatment areas	For the relief of acute and chronic pain associated with many conditions such as: Neuralgia, Fibromyalgia, Sports injuries, Post operative and obstetrics pain.
21	Improved Muscle Tonicity (Level 1)	Arm	To improve muscle strength, circulation, and condition. To facilitate muscle healing.
22		Shoulder	
23		Chest	
24		Waist	
25		Hip	
26		Leg	
27		Feet	

PROGRAM	FUNCTION	ELECTRODE POSITION	USE
28	Improved Muscle Tonicity (Level 2)	Arm	For muscle conditioning, strength, and endurance.
29		Shoulder	
30		Chest	
31		Waist	
32		Hip	
33		Leg	
34		Feet	
35	Circulation & Capillarization	Chest	To increase muscle metabolism, blood flow, and lymph circulation, to help oedema.
36		Waist	
37		Hip	
38		Leg	
39	Body Firming	Chest	For muscle conditioning and endurance training
40		Waist	
41		Hip	
42		Leg	

4.3 Setup and advanced options

There are 42 programs or modes of operation in the AH-TU4.

4.3.1 Shared functions for all modes

1. Press the [⊕] button to switch the unit on, and enter into treatment mode.
2. Press the [CH+] or [CH-] button to select the channel for adjustment.
3. Press the [▲] button to increase the intensity of the selected channel increasing the output by 1mA each time, the maximum is 60mA.
4. Press the [▼] button to decrease the intensity of the selected channel decreasing the output by 1mA each time, the minimum is 0mA.
5. In treatment mode, the device will be locked automatically if no button is pressed in 30 seconds. To unlock the device, press the [CH+] or [CH-] button to select the channel for adjustment.
6. When the electrodes from any of the channels do not make good contact with the skin, the intensity will automatically turn to 0 and a beep will sound.
7. When the program has finished, all of the channels will turn off, and the intensity will turn to 0, returning the unit to the standby mode.
8. Press the [⊕] button while the AH-TU4 is in operating mode and all of the channels will stop working, the intensity will turn to zero (0.0mA), and then timer will reset to the start.
9. If there is no intensity output or activity for 3 minutes the device will turn off automatically.

Chapter 5. Accessories

5.1 Cables

There are 2 pairs of cables supplied with the device, 1 cable for each channel. Please contact your distributor if the cables need replacing.

5.2 Batteries

The AH-TU4 is supplied with 4 alkaline AAA batteries.

5.3 Treating the irritated skin

If any skin irritation appears when using the electrical stimulation therapies it can be treated effectively with a special TENS cream. This cream helps to reduce irritation and allows the skin to recover quickly. This cream does not harm the electrodes and does not interact with the flow of the currents through the skin. This cream is not supplied with your AH-TU4.

5.4 Disposable electrodes

Our reusable disposable electrodes are ready-to-use, straight out of the pack. After use immediately return the electrodes to their backing strip and seal in their bags. Store the electrodes in the refrigerator to extend their usable lifetime. If the electrodes start to lose their adhesive power wet the black gel side with water before and after use. If the internal metal electrode starts to show the electrode must be discarded immediately. Replacement electrodes and leads are available from your distributor.

Chapter 6. Contents of package

The AH-TU4 stimulator includes the following accessories:

- AH-TU4 nerve stimulator
- Set of cables (4pr)
- Batteries (4) – AAA alkaline
- User manual
- Electrodes (2 x 4 packs)
- Carrying case (1)

Chapter 7. Technical information

Model : AH-TU4

Number of channels: Four independent channels

Intensity: 0mA-60mA into 1000 ohm load (each channel is separately adjustable in 60 steps)

Frequency: 2-120Hz

Pulse width: 50uS-400uS

Power: 4 AAA type batteries, (alkaline supplied)

Dimensions: 140 (L) x 60 (W) x 20 (H) mm

Weight: 116 grams (without batteries)
140 grams (with batteries)

Operating range:

Temperature Range: 4°C - 40°C

Air humidity: 30% - 80%, no condensation

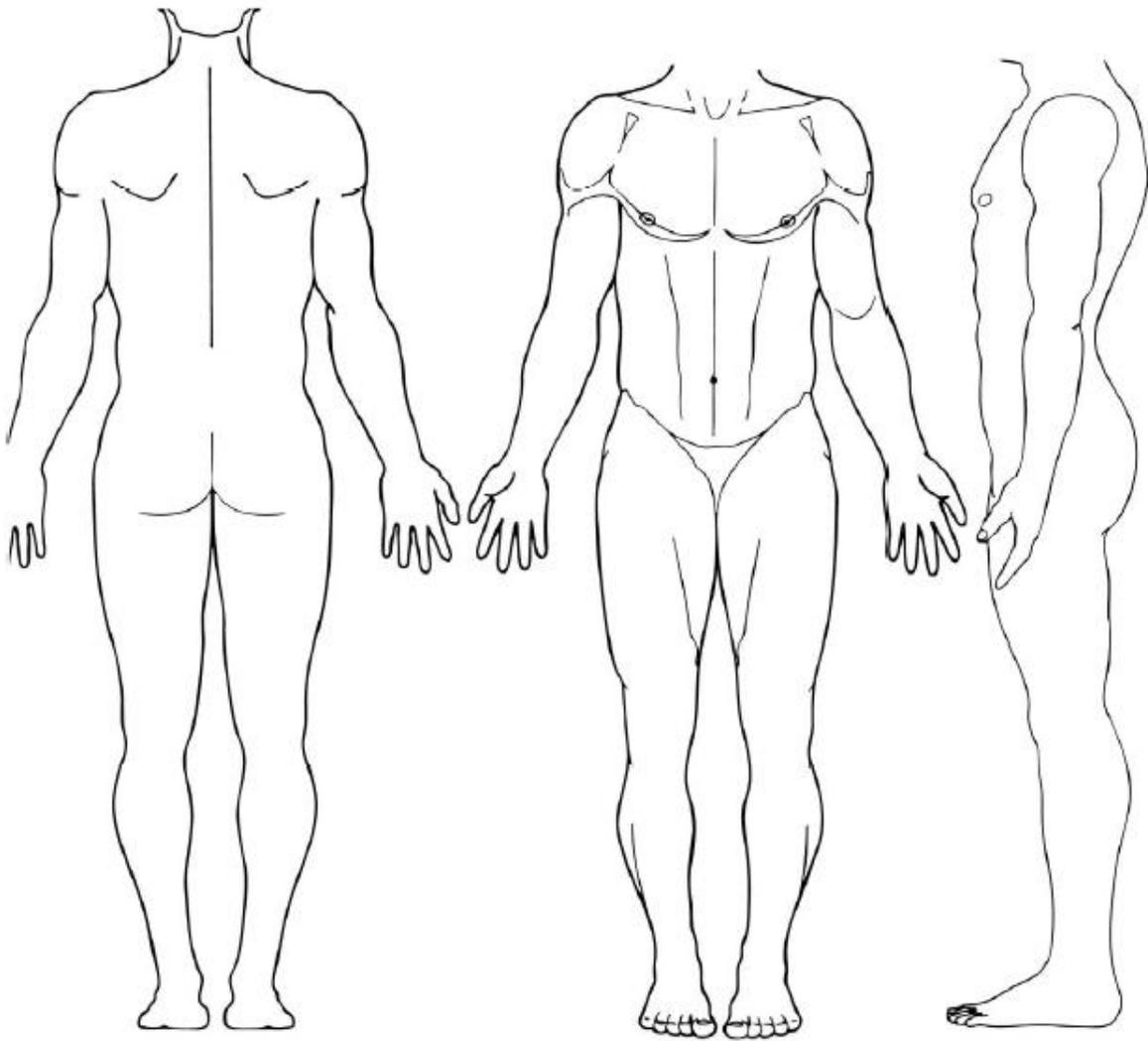
Storage and transport conditions:

Temperature: -10°C - 55°C

Air humidity: 10% - 90%, no condensation

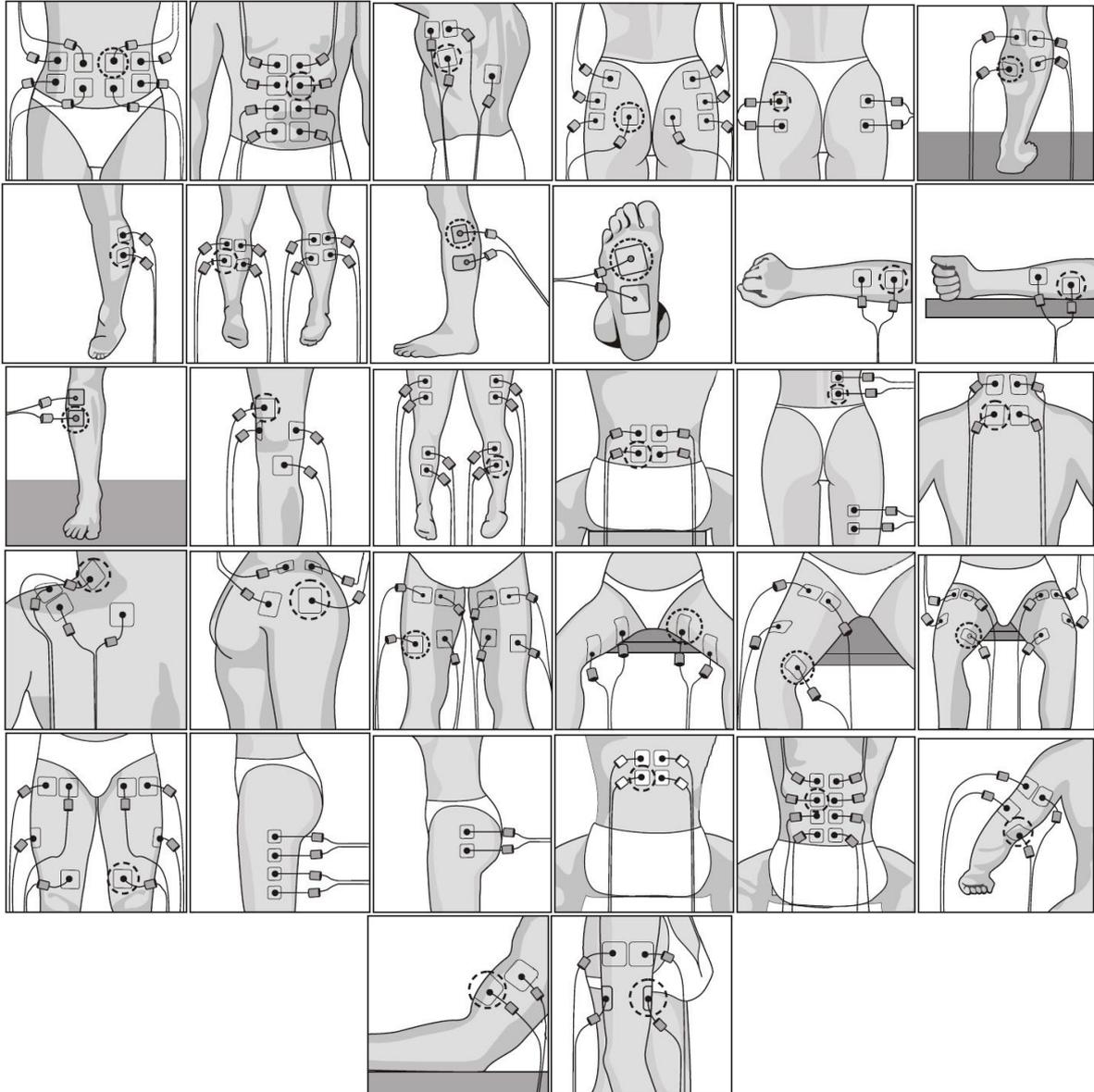
Electrode Placement

(As recommended by your medical practitioner)



Example Electrode Positions

The following diagrams are suggestions only and may not be suitable for your problem or treatment. Please refer to your doctor or medical specialist for advice before using any of the following diagrams.



AH-TU4

Australian Importer and Agent

Name: Allied Health Medical Supplies T/A Physipod

Address: 266 Main Rd West, St Albans, 3021
Victoria, Australia

Tel: 03 9366 6611 **Fax:** 03 9364 2818

Email: enquiries@physipod.com.au

Manufacturer

Name: Shenzhen Dongdixin Technology Co., LTD.

Address: XiLiBaimang Xusheng Industrial Estate No.3
Building 518108,Nanshan Shenzhen, China.

Tel: 0086-755-27652471 **Fax:** 0086-755-27652674

Email: info@dundex.com

Authorized EC-representative:

Shanghai international holding Corp. GmbH(Europe)

Eiffestrasse 80, 20537 Hamburg Germany

Tel: 0049-40-2513175 **Fax:** 0049-40-255726

Copyright 2010 by Allied Health Medical Supplies.

Edition: PhysiPod V2.0

Printed in 2010