

# **User Manual**

**Dual-Channel TENS Pain Reliever** 



**REF** AD-2126

- Thank you very much for selecting the Kinetik Wellbeing Dual-Channel TENS Pain Reliever.
- Please read the user manual carefully and thoroughly so as to ensure the safe usage of this product, keep the manual safe for future reference in case you have problems.













iHealthLabs Europe SAS 36 Rue de Ponthieu, 75008, Paris France



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Our manual should provide you with all the information you need to set up and use this product.

If you have a question, have a look at our Troubleshooting page!

For further assistance, why not contact our Customer Care team directly? We're here to help!

Our Customer Care team are available from 9am-5pm, Monday to Friday (excluding bank holidays).

We promise to respond to all queries and will ensure to resolve any issue you may be having.

You can reach us by...

#### Live Chat:

Simply visit www.kinetikwellbeing.com and send us a message.

#### Email:

customercare@kinetikwellbeing.com

#### Post:

Kinetik Medical Devices Limited Unit 11, Perrywood Business Park, Honeycrock Lane, Salfords, Redhill, RH1 5JQ

#### INTENDED USE

The TENS device is intended to provide temporary relief of muscle soreness caused by exercise, normal household or work activities, as well as to alleviate chronic, intractable pain and pain associated with arthritis. It is important to apply the electrode pads only on intact skin and avoid placing them directly on the head, upper neck, chest, upper back near the heart, spine, and private areas. The TENS device is suitable for adult users, including lay persons and professionals.

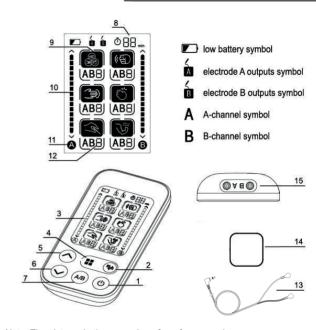
#### CONTRAINDICATION

Patients with implantable medical devices such as pacemakers, life-sustaining medical devices such as artificial heart and lung, and medical devices such as electrocardiograph.

### **OPERATION PRINCIPLE**

TENS lessens pain by sending electrical impulses (Output pulse frequency: 0-100Hz; Output voltage: max. 120 Vpp (500 ohm); Output pulse width:  $20{\sim}100\mu s$ ) through electronic core and self-adhesive pads placed on the skin. The electrical signal then passes to the nerves under the skin, these nerves take messages to the brain about what they feel, such as thump, vibrate, press and knead. TENS signals can interfere the message of pain on these nerves with a tingling sensation which changes the feeling of the pain. Furthermore, low frequency vibrations can promote circulation of blood and relieve pain.

### SETUP AND OPERATING PROCEDURES



Note: The pictures in the manual are for reference only.

- 1. ON/OFF button
- 2. Switch in-mode setting button
- 3. LCD screen
- 1. Switch mode button
- 5. Increase intensity
- . Reduce intensity
- 7. Channel selection button
- 8. Remaining treatment time display
- 9. Treatment mode

- 10. Intensity
- 11. Currently adjustable channel
- 12. In-mode treatment
- 13. Output cables
- 14. Electrode gel pads
- 15. Output channel port

PACKAGE CONTENTS

NOTICE

- 1 TENS
- 1 Operation Guide
- 2 Output Cables
- 4 Electrode Gel Pads
- 1 Carry Case

### **SPECIFICATIONS**

- · Product name: Dual-Channel TENS Pain Reliever
- Model: AD-2126
- Classification: Internally powered, Type BF applied part, IP22, No AP or APG, Continuous operation
- Machine size: Approx. 120.3mm x 60.3mm x 20.6mm (4 3/4"x 2 3/8" x 13/16")
- Weight: Approx. 73g (2 9/16 oz.) (exclude batteries)
- Electrode Gel Pads: Approx. 50mm x 50mm (1 31/32" x 1 31/32"), Applicable to all treatment modalities. Electrode Pads model: EP505036N
- Output Cable: Approx. 1200mm (47 1/4"). Wire model: 23507-3.8-1200
- Output channel: 2 (A and B)
- Number of treatment program: 24 sub-mode in 6 main modes: Default, Thump, Press, Slap, Acupuncture and Relax
- · 15 intensities
- Output pulse frequency: 0-100Hz
- Output voltage: max. 120 Vpp (500 ohm)
- Output pulse width: 20~100µs
- · Large LCD with blue backlight
- 15 minutes countdown time for treatment
- Batteries: 4 x 1.5V The Size AAA
- Environmental temperature for operation: 5°C ~ 40°C
- Environmental humidity for operation: ≤80%
- Environmental temperature for storage and transport: -20°C  $\sim$  55°C
- Environmental humidity for storage and transport: ≤90%
- Environmental pressure: 80kPa 105kPa
- · Device life: 3 years
- Battery life: Approx. 2 months with alkaline batteries and 15 min. usage per day Note: These specifications are subject to change without notice.

- Read all of the information in the operation guide and any other literature in the box before operating the unit.
- This TENS device is designed for adults and never should be used on infants or young children. Consult your physician or other health care professionals before use on older children.
- The device must never be used near to the heart, such as chest or the upper back. The stimulation electrodes must not be placed on any part of the front ribcage (where the ribs and breastbone are located), especially not on the two large pectorals. this can increase the risk of ventricular fibrillation and induce cardiac arrest.
- 4. The device should not be applied across or through the head, directly on the eyes, covering the mouth.on the front of the neck, (especially the carotid sinus), or from electrodes placed on the chest and the upper back or crossing over the heart.
- The device must never be used on both feet simultaneously or on the spine.And never be used on private parts or skin disease parts
- The therapy time should not be more than 30 minutes in each session if the electrode pads are on the same part of the body.
- When you feel unwell or your skin is abnormal in using the TENS device, please stop using it immediately and ask for and follow the advice form the doctor.
- 8. Before you are to shift the electrode pad to the other position in using the apparatus, you must turn off the power first.
- 9. Do not make any sharp kinks in the connecting leads or electrodes.
- Observe caution when using the device in the immediate vicinity of cellular phones that are switched on.
- 11. Please do not let children or persons who are incapable of expressing their own will use the TENS device; Keep the product at a place inaccessible to children to prevent children from swallowing the batteries or small parts.or it may lead to incident or make one feel unwell.

NOTICE

NOTICE

- 12. Please do not use the TENS device in bathroom or other place in high humidity. Otherwise one may receive fierce stimulation.
- 13. Please do not use it when driving, Otherwise it may lead to incident.
- 14. Please do not use it in sleep.
- 15. In the process of stimulating and therapy, please do not get the metal part of leather belt, wristwatch or necklace touch the leaf electrode pads.
- 16. Please do not use it for other purpose than treatment.
- 17. The device might not meet its performance specifications or cause safety hazard if stored or used outside the specified temperature and humidity ranges in specifications.
- 18. User who with implanted electronic equipment, such as pacemakers and intracardiac defibrillators has not got the doctor's advice must not use the device. Pregnant women should not use the device during the first trimester, and should always consult a doctor, midwife or physiotherapist prior to use.
- Simultaneous connection of a PATIENT to a high frequency, surgical ME equipment may result in burns at the site of the stimulator electrodes and possible damage to the stimulator.
- Operation in close proximity (e.g. 1 m) to a shortwave or microwave therapy EQUIPMENT may produce instability in the STIMULATOR output.
- Application of electrodes near the thorax may increase the risk of cardiac fibrillation.
- 22. Please do not knock down, repair, and rebuild it privately. if you have any problem, please contact the service center.
- 23. Please do not use the electrode pads and wire other than supplied by the manufacturer, otherwise it may bring biocompatible hazard and might result in uncomfortable feeling.
- Please do not share the electrode pads with other infective person to avoid cross-infection.
- 25. The output wave parameters are not be influence by load resistance, except output voltage.

- 26. Information regarding potential electromagnetic or other interference between the electrical muscle stimulator and other devices together with advice regarding avoidance of such interference please see part ELECTROMAGNETIC COMPATIBILITY INFORMATION. It is suggested that the unit be kept at least 30 cm away from other wireless devices, such as WLAN unit, microwave oven, etc.lt can't be used near active HF SURGICAL EQUIPMENT and the RF shielded room of an ME SYSTEM for magneticresonance imaging, where the intensity of EM DISTURBANCES is high.
- 27. Attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- 28. If you are allergic to the device's material, please don't use this device.
- 29. The patient is an intended operator.
- 30. For Hospitals and Clinics, in the presence of or when attached to the body, electronic monitoring equipment (e.g. cardiac monitors, ECG alarms), which may not operate properly when the electrical stimulation device is in use.

### SETUP AND OPERATING PROCEDURES

### **Battery Loading**

- a. Open battery cover at the back of the monitor.
- b. Load four "AAA" batteries. Make sure the batteries are inserted according to the positive and negative marks ("+" and "-") printed in the battery compartment.
- c. Close the battery cover.

When LCD shows battery symbol . replace all batteries with new ones.

Rechargeable batteries are not suitable for this TENS machine.

Remove the batteries if the TENS machine will not be used for a month or more to avoid damage of battery leakage.



Avoid the battery fluid getting into or near your eyes. If it should get in your eyes, immediately rinse with plenty of clean water and contact a healthcare professional.



The negative terminal of the battery needs to be compressed into the battery compartment properly after horizontal compression of the negative electrode. The battery should be in contact with the spring.



Make sure the battery cover is intact and not damaged before installing the battery.



The monitor, the batteries the electrode gel pad, and the output cable must be disposed of according to local regulations at the end of their usage.

### **Prepare the Electrode Gel Pads**

- a. Connect the output cable to the electrode gel pads. Connect the output cable to the output channel port on the TENS machine.
- b. Each electrode gel pad is protected by a layer of transparent film. Remove the layer of film before sticking the pads to the skin. Press the pads to ensure adhesion



Please use water to wash or use a wet cloth to gently wipe the electrodes gel pads when cleaning them. Do not use anything else to clean as this may scratch the surface of the electrode gel pad.



Wires must stay away from babies and children, to prevent the risk of suffocation and death

#### Note:

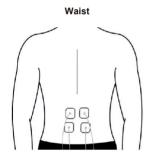
- 1. Clean the intended skin area before applying the electrode gel pads.
- 2. You should hold the plug when pulling it out. Please do not pull the wire.
- 3. Never stick two electrode gel pads to each other. Electrode gel pads have to fit precisely inside the conductive surface.
- 4. If the pads are not stuck in the correct position, remove the pads and attach them again.
- 5. Keep the electrode gel pads clean and do not expose to heat or direct sunlight
- 6. If the electrode gel pads do not attach or are dirty, wipe with a wet cloth or replace with new ones. Do not clean the pad or adhesive gels with any chemical. Please contact Kinetik Wellbeing to get replacement pads.
- 7. It is recommended to use the electrode gel pad less than 20 times. The specific number of times that the pad will be suitable depends on the use and storage conditions.
- 8. Place the electrodes on intact skin only. Do not place on cuts or damaged skin.

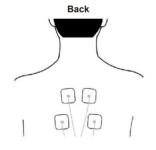
# **Treatment Time Adjustment**

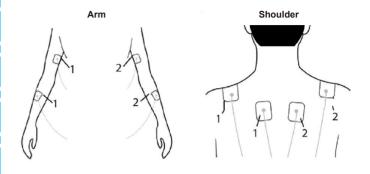
- After turning device on, press and hold the button to enter the treatment time setting when the device is on.
- When treatment time flickers on the LCD (the default value is 15 minutes), press or button to adjust the treatment time to a max of 30 minutes. Press the (1) button to finish the treatment time setting.

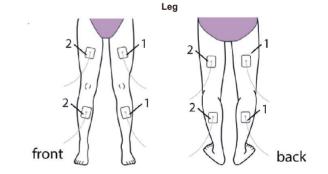
# **Applying the Electrode Gel Pads**

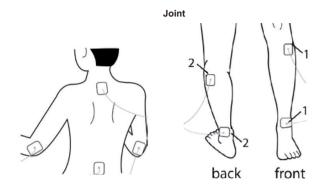
The TENS machine can treat many different types of pain. Please see diagrams of where to place the electrodes for the most common forms of pain. For other areas of pain, place the electrodes on either side of the area of pain.

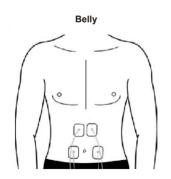


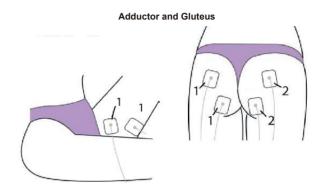


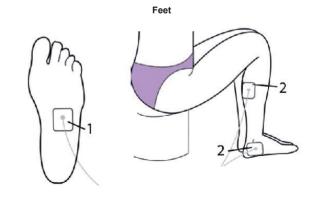












# **Using Your TENS**

- a. Ensure electrode gel pads are firmly on the treatment area and output cables are fully inserted into TENS machine.
- b. Press the ON/OFF (  $\circlearrowleft$  ) button to turn on the device. Note: you can press the "ON/OFF" button at anytime to turn off the device.
- c. Press the A/B button to select current channel (channel A) or (channel B).
- d. Press the **s** button to select mode.
- e. Press the button to select in-mode setting.
- f. Press or button to adjust output intensity of selected channel.
- g. When the output intensity is at 1~15 , the treatment starts and the time counts down with a flashing time sign on the LCD display.
- h. The defaulted treatment time is 15 minutes. During the treatment, the time will not change if the program or the intensity is changed.
- After treatment or channel A and B intensity are at 0, the device will be shut off automatically in 20s if no operation.

### SETUP AND OPERATING PROCEDURES

| Mode | Display on LCD   | Your Feeling  | Parameters of Wave   |
|------|--|---------------|--|
| 1    |  | Composite (1) | Output pulse frequency = 2~33.33Hz Output pulse width = 20~100µs                   |
| 2    |  | Composite (2) | Output pulse frequency = 2~20Hz Output pulse width = 20~100µs                      |
| 3    |  | Composite (3) | Output pulse frequency = 1~33.33Hz Output pulse width = 20~100µs                   |
| 4    |  | Composite (4) | Output pulse frequency = 20~50Hz Output pulse width = 20~100µs                     |
| 5    | (B)  | Thump (1)     | Output pulse frequency = 1~16.67Hz Output pulse width = 20~100µs Continuous output |
| 6    | - B  | Thump (2)     | Output pulse frequency = 1~16.67Hz Output pulse width = 20~100µs Intermittent      |
| 7    | THE STATE OF THE S | Thump (3)     | Output pulse frequency = 1~6.67Hz Output pulse width = 20~100µs                    |
| 8    | L B  | Thump (4)     | Output pulse frequency =<br>1~6.67Hz<br>Output pulse width =<br>20~100µs           |

| 9  |                | Press (1) | Output pulse frequency = 50Hz Output pulse width = 20~100µs      |
|----|----------------|-----------|--|
| 10 | 3              | Press (2) | Output pulse frequency = 33.33Hz Output pulse width = 20~100µs   |
| 11 |                | Press (3) | Output pulse frequency = 50Hz Output pulse width = 20~100µs      |
| 12 | ( <del>)</del> | Press (4) | Output pulse frequency = 33.33Hz Output pulse width = 20~100µs   |
| 13 | Ö              | Slap (1)  | Output pulse frequency = 5~20Hz Output pulse width = 20~100µs    |
| 14 | Ö              | Slap (2)  | Output pulse frequency = 2.5~10Hz Output pulse width = 20~100µs  |
| 15 | Ö              | Slap (3)  | Output pulse frequency = 3.33-5Hz Output pulse width = 20~100µs  |
| 16 | Ü              | Slap (4)  | Output pulse frequency = 3.33~10Hz Output pulse width = 20~100µs |

| 17 | (K)                                    | Acupuncture (1)         | Output pulse frequency = 2.5~100Hz; Output pulse width = 20~100µs;            |
|----|--|-------------------------|---|
| 18 | (M) <sup>1</sup>                       | Acupuncture (2)         | Output pulse frequency = 50~100Hz; Output pulse width = 20~100µs;             |
| 19 | (%) m                                  | Acupuncture (3)         | Output pulse frequency =<br>11.11~100Hz;<br>Output pulse width =<br>20~100µs; |
| 20 | (M)                                    | Acupuncture (4)         | Output pulse frequency =<br>16.67~100Hz;<br>Output pulse width =<br>20~100µs; |
| 21 |  | Muscular Relaxation (1) | Output pulse frequency = 1~10Hz; Output pulse width = 20~100µs;               |
| 22 |  | Muscular Relaxation (2) | Output pulse frequency = 1~50Hz; Output pulse width = 20~100µs;               |
| 23 | ************************************** | Muscular Relaxation (3) | Output pulse frequency = 1~50Hz; Output pulse width = 20~100µs;               |
| 24 | T ( )                                  | Muscular Relaxation (4) | Output pulse frequency =<br>16.67~100Hz;<br>Output pulse width =<br>20~100µs; |

# **Troubleshooting**

| Problem                          | Cause   | Solution   |
|----------------------------------|---|--|
| You have no feeling of stimulus. | 1. Are the batteries exhausted? 2. Are the batteries correctly inserted? 3. Is the wire correctly connected? 4. Have you removed the transparent protective film over the electrode pad?            | Replace the batteries.     Correctly load the batteries.     Firmly connect the wire.     Remove the protection.   |
| Stimulus is weak.                | 1. Do the electrode pads firmly stick to the skin? 2. Are the electrode pads overlapped? 3. Are the electrode pads dirty? 4. Is intensity too weak? 5. Are the electrode pads positioned correctly? | Firmly stick the electrode gel pad to the skin.     Separate the electrode pad and stick them to the skin again.     Please clean the electrode pad.     Change the intensity according to Part 5.     Change the position of the electrode pad. |

| The skin becomes red.                               | 1. Is the therapeutic time too long? 2. Are the electrode pads too dry? 3. Does the electrode pad closely stick to the skin? 4. Are the electrode pads dirty? 5. Is the surface of the electrode pads scratched? | 1. Control it within 10~15 minutes at a time.  2. Please gently wipe them up with wet cloth and then use them again.  3. Please closely stick the electrode pad to the skin.  4. Please clean the electrode pad.  5. Please replace them with new electrode pad. |
|---|--|--|
| Power source is cut off in the therapeutic process. | Have the electrode pads come off the skin?     Is the wire disconnected?     Have the batteries been exhausted?  | Turn off the power and stick the electrode pad firmly to the skin.     Turn off the power and connect the wire.     Please replace them with new ones.   |

#### **EXPLANATION OF SYMBOLS ON UNIT**

- Do not drop this monitor or subject it to strong impact.
- Avoid high temperature and solarization. Do not immerse the monitor in water as this will result in damage to the monitor.
- If this monitor is stored in cold temperatures, allow it to acclimate to room temperature before use.
- If you do not plan to use the monitor for a long time, please remove the batteries
- Do not attempt to disassemble this monitor.
- Be sure not to move the electrode pads to another part of your body without turning off the power first.
- Avoid contact of the electrode pads with anything made of metal, such as belts or necklaces.
- 8. After using the device, please remove output cables out of output channel and re-attach the pads to the protective transparent film.
- 9. Do not twist or pull the output cables.
- 10. Please do not use any chemical to clean the main unit or electrode pads. In case you need to clean them, please wipe with a damp cloth. It is recommended to clean the electrode pads after every use.
- 11. No component can be repaired by the user in the monitor. The circuit diagrams, component part lists, descriptions, calibration instructions, or other information will require an appropriately qualified technical personnel to repair those parts of equipment.
- 12. The TENS machine can maintain the safety and performance characteristics for three years.
- 13. The monitor requires 6 hours to warm from the minimum storage temperature (-20°C) between uses until the monitor is ready for its INTENDED USE when the ambient temperature is 20°C.
- 14. The monitor requires 6 hours to cool from the maximum storage temperature (55°C) between uses until the monitor is ready for its INTENDED USE when the ambient temperature is 20°C.
- 15. No servicing/maintenance while the monitor is in use.

| $\overline{}$  |   |  |
|----------------|---|--|
| <b>③</b>       | Symbol for "The operation guide must be read"   |  |
| ҟ              | Symbol for "Type BF applied parts" (The electrode pads are type BF applied part)  |  |
| <u> </u>       | Indicates the need for the user to consult the instructions for use for important cautionary information such as warnings and precautions that cannot, for a variety of reasons, be presented on the medical device itself.             |  |
| Z              | Symbol for "ENVIRONMENT PROTECTION - Electrical waste products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice"                 |  |
| (F             | Recyclable identification   |  |
| SN             | Symbol for "Serial Number"  |  |
| ===            | Symbol for "Direct Current"   |  |
|                | Symbol for "Manufacturer"   |  |
| ∠ÇN            | Symbol for "Made in China" and "Manufacture date"   |  |
| IP22           | The first characteristic numeral symbol for "Degrees of protection against access to hazardous parts and against solid foreign objects." The second characteristic numeral symbol for "Degrees of protection against ingress of water." |  |
| EC REP         | Symbol for "European Authorised Representative (EC Rep)"  |  |
| <b>C</b> €0197 | Symbol for "Complies with MDD93/42/EEC requirements"  |  |
| REF            | Symbol for Commercial Product Code / Model Number   |  |
| LOT            | Symbol for Batch Code   |  |

### WARRANTY INFORMATION

EC REP

iHealthLabs Europe SAS 36 Rue de Ponthieu, 75008, Paris, France

ANDON HEALTH CO., LTD. No. 3 Jin Ping Street, Ya An Road, Nankai District, Tianjin 300190, China.

### **ELECTROMAGNETIC COMPATIBILITY INFORMATION**

Table 1 - Emission limits per environment

| Phenomenon                          | Compliance                   | Electromagnetic Environment                                      |
|-------------------------------------|------------------------------|--|
| Conducted and radiated RF emissions | CISPR 11 Group 1,<br>Class B | The device is intended to be used in home healthcare environment |
| Harmonic distortion                 | IEC 61000-3-2<br>NA          | The device is powered by battery                                 |
| Voltage fluctuations and flicker    | IEC 61000-3-3<br>NA          | The device is powered by battery                                 |

Table 2 - Enclosure Port

| Phenomenon  | Basic EMC     | Immunity Test Levels                         |
|---|---------------|--|
| Phenomenon  | Standard      | Home Healthcare Environment                  |
| Electrostatic<br>Discharge  | IEC 61000-4-2 | ±8 kV contact<br>±2kV, ±4kV, ±8kV, ±15kV air |
| Radiated RF EM field  | IEC 61000-4-3 | 10V/m<br>80MHz-2.7GHz<br>80% AM at 1kHz      |
| Proximity fields<br>from RF wireless<br>communications<br>equipment | IEC 61000-4-3 | Refer to table 3                             |
| Rated power frequency magnetic fields                               | IEC 61000-4-8 | 30A/m<br>50Hz or 60Hz                        |

### **ELECTROMAGNETIC COMPATIBILITY INFORMATION**

Table 3 - Proximity fields from RF wireless communications equipment

| Test               | Band      | Immunity Test Levels                         |
|--------------------|-----------|--|
| Frequency<br>(MHz) | (MHz)     | Professional Healthcare Facility Environment |
| 385                | 380-390   | Pulse modulation 18Hz, 27V/m                 |
| 450                | 430-470   | FM, ±5kHz deviation, 1kHz sine, 28V/m        |
| 710                | 704-787   | Pulse modulation 217Hz, 9V/m                 |
| 745                |           |  |
| 780                |           |  |
| 810                | 800-960   | Pulse modulation 18Hz, 28V/m                 |
| 870                |           |  |
| 930                |           |  |
| 1720               | 1700-1990 | Pulse modulation 217Hz, 28V/m                |
| 1845               |           |  |
| 1970               |           |  |
| 2450               | 2400-2570 | Pulse modulation 217Hz, 28V/m                |
| 5240               | 5100-5800 | Pulse modulation 217Hz, 9V/m                 |
| 5500               |           |  |
| 5785               |           |  |

### **ELECTROMAGNETIC COMPATIBILITY INFORMATION**

### Table 4 - PATIENT coupling PORT

| Phenomenon  | Basic EMC<br>Standard | Immunity Test Levels   |
|---|-----------------------|--|
| Phenomenon  |                       | Home Healthcare Environment  |
| Electrostatic<br>Discharge                              | IEC 61000-4-2         | ±8 kV contact<br>±2kV, ±4kV, ±8kV, ±15kV air   |
| Conducted<br>Disturbances<br>Induced by RF<br>Fields a) | IEC 61000-4-6         | 3 V<br>0,15 MHz – 80 MHz<br>6 V in ISM and amateur<br>radio bands between 0,15 MHz<br>and 80 MHz<br>80 % AM at 1 kHz |

## Table 5 - Signal input/output parts PORT

| Dhanamanan                                  | Basic EMC<br>Standard | Immunity Test Levels   |
|---|-----------------------|--|
| Phenomenon                                  |                       | Home Healthcare Environment  |
| Electrostatic<br>Discharge                  | IEC 61000-4-2         | ±8 kV contact<br>±2kV, ±4kV, ±8kV, ±15kV air   |
| Electrical fast transients / bursts         | IEC 61000-4-4<br>NA   | The device is powered by battery   |
| Surges<br>Line-to-ground                    | IEC 61000-4-5<br>NA   | The device is powered by battery   |
| Conducted Disturbances Induced by RF Fields | IEC 61000-4-6         | 3 V<br>0,15 MHz – 80 MHz<br>6 V in ISM and amateur<br>radio bands between 0,15 MHz<br>and 80 MHz<br>80 % AM at 1 kHz |