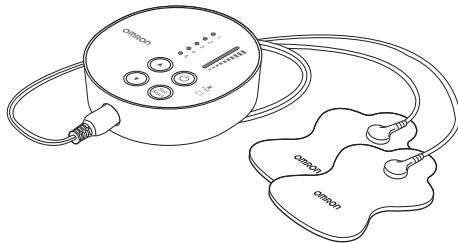


# OMRON

## INSTRUCTION MANUAL

### Electronic Nerve Stimulator

HV-F013



All for Healthcare

**5**  
Treatment  
Programs

**10**  
Intensity  
Levels

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## INTRODUCTION

Thank you for purchasing the OMRON Electronic Nerve Stimulator.

In order to use the unit safely, read the complete manual carefully before using the unit for the first time.

Keep this instruction manual in a convenient place or store with the unit for future reference.

This box contains the following components:

- 1 Main Unit
- 1 Electrode Cord
- 2 Long Life Pads
- 1 Pad Holder
- 2 “AAA” Batteries (LR03)
- 1 Instruction Manual
- 1 Quick Start Guide / Pad Placement Guide

### **Intended Use**

#### **Medical purpose**

OMRON Electronic Nerve Stimulator is intended for the relief of pain associated with sore or aching muscles of the lower back, arms, legs, feet and shoulder due to strain from exercise or normal household and work activities. It should be applied to normal, healthy, dry, clean skin of adult patients.

#### **Intended User**

This unit is intended to be operated by adults who can understand this instruction manual. It is not for professional use in hospitals or other medical facilities, it is intended for home use only.



## HOW Electronic Nerve Stimulator WORKS

### What is it?

**The OMRON Electronic Nerve Stimulator unit is a portable device designed for adults only.** It is designed to reduce and relieve muscle and joint pain, stiffness and numbness in the back, arms, legs, shoulder and foot by applying electrical nerve stimulation to the surface of the skin near the site of the pain. **Any of the modes can safely be used on body parts or pains described in this manual or Quick Start Guide/Pad Placement Guide. Just find one that feels good and is comfortable on your pain.** It can be successfully used in conjunction with any other pain treatment or medication.


This type of therapy, called Transcutaneous Electrical Nerve Stimulator (TENS), has been used for over 30 years by medical professionals such as physical therapists and chiropractors.

### How does it work?




Scientific theory suggests that electrical stimulation therapy may work in several ways:

1. The gentle electrical pulses move through the skin to nearby nerves to block or shut out the pain message from ever reaching the brain from the source of the pain.
2. The gentle electrical pulses increase the production of the body's natural pain killer, such as endorphins.
3. Furthermore, it is thought that the electrical stimulation improves blood circulation as well. Muscles contract and relax with the flow of the electrical stimulation. With repeated contracting and relaxing, the blood flows in and out and the blood circulation is improved.

## IMPORTANT SAFETY PRECAUTIONS AND WARNINGS


 *It is important that you read all the warnings and precautions included in this instruction manual because they are intended to keep you safe, prevent injury and avoid a situation that could result in damage to the unit.*

### SAFETY SYMBOLS USED IN THIS INSTRUCTION MANUAL

 <b>DANGER</b>	Improper use may cause danger resulting in death or serious injury. These are situations in which the device should not be used.
 <b>WARNING</b>	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
 <b>CAUTION</b>	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient or damage to the equipment or other property.

### **DANGER**

Do not use this unit with these other devices:

- (1) If you have a **pacemaker**, implanted defibrillator, or other **implanted metallic** or electronic device. Such use could cause electric shock, burns, electrical interference or death. 
- (2) **Do not use** this device **while using another TENS** device.
- (3) Together with a **life-supporting medical electronic device** such as an artificial heart or lung or respirator.
- (4) 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.
- (5) For Hospitals and Clinics, 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.
- (6) For Hospitals and Clinics, operation **in close proximity** (e.g. 1m) **to a shortwave or microwave therapy ME equipment** may produce instability to the stimulator output.

## IMPORTANT SAFETY PRECAUTIONS AND WARNINGS

### DO NOT USE THIS UNIT UNDER THESE CONDITIONS

**⚠ Consult with your physician before using this unit.**

The unit may cause lethal rhythm disturbances in certain susceptible individuals. If you have had a recent surgical procedure, the stimulation may disrupt the healing process.

### DO NOT USE ON THESE INDIVIDUALS

**⚠ Pregnant women.**

**⚠ Do not use on children or infants** because this device has not been evaluated for pediatric use.

**⚠ Keep out of the reach of young children** because the electrode cord could cause strangulation.

**⚠ Persons incapable of expressing their thoughts or intentions.**

**⚠ Persons incapable of operating the unit by themselves.**

**⚠ Use caution if you have a tendency to bleed internally**, such as following an injury or fracture.

**⚠ If you have suspected or diagnosed heart disease**, you should follow precautions recommended by your physician.




**⚠ If you have suspected or diagnosed epilepsy**, you should follow precautions recommended by your physician.





**⚠ Use caution if stimulation is applied over the menstruating uterus.**

**⚠ This device is not intended for use by persons (including children) whose physical, sensory or mental abilities are different or reduced, or lack of experience or knowledge unless such persons are afforded supervision or training to operate the appliance by a person responsible for their safety. Children should be supervised to ensure they do not use the equipment as a toy.**

## IMPORTANT SAFETY PRECAUTIONS AND WARNINGS

### ⚠ NEVER APPLY THE PADS TO THESE BODY AREAS:

	The <b>head</b> , the <b>mouth</b> , or any area of the <b>face</b> .
	The <b>neck</b> or any area of the <b>throat</b> because this could cause severe muscle spasms resulting in closure of the airway, difficulty in breathing, or adverse effects on heart rhythm or blood pressure.
	Near the <b>heart</b> , or on <b>genital area</b> .

	Both sides of the <b>thorax</b> simultaneously (lateral or front and back), or <b>across your chest</b> because the introduction of electrical current may cause rhythm disturbances which could be lethal.
	
	On the <b>calves of both legs</b> at the same time because this may cause cardiac disturbance.
	On the <b>soles of both feet</b> at the same time because this may cause cardiac disturbance.

**Open wounds or rashes or over swollen, red, infected or inflamed areas or skin eruptions** (such as varicose veins, phlebitis, thrombophlebitis and thrombosis), or on top of or close to **cancerous lesions**, or over areas of **skin that lack normal sensation**.

### DO NOT USE THIS UNIT DURING THESE ACTIVITIES

- ⚠ **When in the bath or shower;**
- ⚠ **While sleeping;**
- ⚠ **While driving, operating machinery, or during any activity in which electrical stimulation can put you at risk of injury.**

## IMPORTANT SAFETY PRECAUTIONS AND WARNINGS

### PAIN MANAGEMENT WARNINGS

- ⚠ If you have had medical or physical treatment for your **pain**, **consult with your physician** before using this unit.
- ⚠ If your pain does not improve, becomes seriously chronic or severe, or continues for **more than five days**, stop using the unit and **consult with your physician**.
- ⚠ The mere existence of pain functions as a very important warning telling us that something is wrong. Therefore, if you suffer from any serious illness, **consult your physician** in order to confirm that it is advisable for you to use this Electronic Nerve Stimulator unit.
- ⚠ If you have any infectious disease or illness, **consult with your physician** before using this unit.

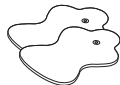
### DO NOT ALTER THE UNIT

- ⚠ Do not plug this cord into any other device that is not an OMRON HV-F013.
- ⚠ **No modification** of this unit is allowed.
- ⚠ **Use this unit only with the pads, cable, and accessories recommended** by the manufacturer to avoid damage to the unit.



### WARNINGS REGARDING THE PADS

- ⚠ **Apply pads to normal, healthy, dry, clean skin (of adult patients)** because it may otherwise disrupt the healing process.
- ⚠ **If you experience any skin irritation or redness** after a session, do not continue stimulation in that area of the skin.





## IMPORTANT SAFETY PRECAUTIONS AND WARNINGS

### PRECAUTIONS REGARDING THE PADS

- ⚠ **Do not move the pads to another location while the unit is on.**
- ⚠ Therapy won't work with just one pad. **You MUST USE TWO PADS at the same time.**
- ⚠ **Make sure the components are connected well and the pads are fixed** on the part of the body you wish to treat or the therapy may not be effective.
- ⚠ **Pad should not touch any metal object**, such as a belt buckle, necklace, or other metal worn under clothing.
- ⚠ **Do not overlap pads** or put pads on top of each other. It may weaken or stop therapy, or the unit may stop working.  
**Gel pads may also stick together** and cause gel to be removed when separating.
- ⚠ **Do not apply pads with wet hands.**
- ⚠ **Do not leave pads attached to the skin after treatment.**

- ⚠ **The pads are for the exclusive use of a single patient. Do not share pads with another person.** This may cause a skin irritation or infection.
- ⚠ **Do not bend or fold** because the gel may get damaged and it won't stick or function properly.
- ⚠ To avoid damage to the adhesive surface of the pads, **put the pads only on the skin or on the plastic pad holder provided.**
- ⚠ **Always place clean pads in accordance with illustrations** provided (Refer to pages 16-20, Pad Placement).
- ⚠ **Do not apply ointment or any solvent** to the pads or to your skin because it will disrupt the pads from functioning properly. The self-adhesive pads will adhere to your skin.

⚠ **Place pads at least 2.5 cm apart for optimal results.**

## IMPORTANT SAFETY PRECAUTIONS AND WARNINGS

### CAUTION WHILE USING UNIT

#### MAIN UNIT

- ⚠ **If the unit is not functioning properly** or you feel discomfort, immediately stop using the unit.
- ⚠ **Do not use for any other purpose** except for what it is intended for.
- ⚠ **Do not place in a room with high humidity**, such as a bathroom. This will damage the unit. **Ideal temperature for using** 10°C - 40°C, 30% - 80% relative humidity.
- ⚠ Do not use the unit without proper lighting. You may not be able to operate unit successfully.

#### CORD

- ⚠ Do not wash the electrode cord.
- ⚠ **Do not insert the electrode plug into any place other than** the jack on the unit.
- ⚠ **Do not pull on the electrode cord** during treatment.
- ⚠ **Do not bend or pull the end of the cord.**
- ⚠ When pulling out the cord from the unit, **hold the plug and pull.**
- ⚠ **Replace the cord when broken or damaged.**

#### BATTERY

- ⚠ **Do not throw the batteries into a fire.** The batteries may explode.
- ⚠ **Dispose of the unit, batteries, and components according to applicable legal regulations.** Unlawful disposal may cause environmental pollution.
- ⚠ **Do not mix alkaline and manganese batteries** as this will shorten the battery life.
- ⚠ During therapy, do not remove the battery cover and do not touch the battery terminals.
- ⚠ Do not use rechargeable batteries.

#### PADS

- ⚠ **Use only pads recommended by the manufacturer** to avoid affect the safety and effectiveness of electrical stimulation.
- ⚠ **The electrical performance characteristics of pads may affect the safety and effectiveness** of electrical stimulation.
- ⚠ **Applying pads incorrectly** could result in discomfort or skin burns.
- ⚠ Detach the pads before replacing the batteries.

## IMPORTANT SAFETY PRECAUTIONS AND WARNINGS

### General Precautions

- ⚠ The long-term effects of electrical stimulation are unknown.
- ⚠ Apply stimulation to only normal, intact, clean, dry, and healthy skin.
- ⚠ TENS is not effective in treating the original source or cause of the pain, including headache.
- ⚠ TENS is not a substitute for pain medications and other pain management therapies.
- ⚠ TENS devices do not cure disease or injuries.
- ⚠ TENS is a symptomatic treatment and, as such, suppresses the sensation of pain that would otherwise serve as a protective mechanism.
- ⚠ Effectiveness is highly dependent upon patient selection by a practitioner qualified in the management of pain patients.
- ⚠ **You may experience skin irritation or hypersensitivity** due to the electrical stimulation or electrical conductive medium (gel).

- ⚠ **Keep unit away from young children.** The unit contains small pieces that may be swallowed. Immediately contact your physician.

### Possible Adverse Reactions

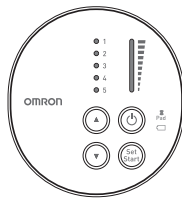
- ⚠ **You should stop using the unit and consult with your physician** if you experience adverse reactions from the unit.
- ⚠ **You may experience skin irritation and burns** beneath the stimulation electrodes applied to your skin.
- ⚠ **You may experience headache and other painful sensations** during or following the application of electrical stimulation near your eyes and to your head and face.
- ⚠ **Do not use to treat one region for extended periods of time (more than 30 minutes a session, up to 3 times/day)** or muscles in that region may become exhausted and sore.

## KNOW YOUR UNIT

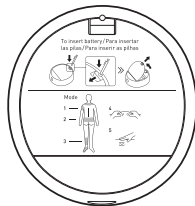
### PACKAGE CONTENTS

Main Unit

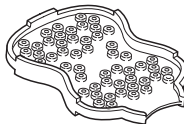
Front



Back



Pad Holder  
(1 standard)



Instruction Manual



Batteries\*

(2 “AAA” batteries (LR03))

\* The supplied batteries are for trial use only, they may have a shorter life.



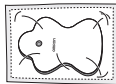
Quick Start Guide / Pad Placement Guide



Electrode Cord



Long Life Pads



## KNOW YOUR UNIT

### FEATURES

1. **Five pre-set modes** (Arm/Shoulder, Lower Back, Leg/Foot, Knead, Steady).
2. **Ten intensity levels** (1 low to 10 high).
3. **Pair of pads** (durable, re-usable, washable, up to 150 uses).  
(Only use OMRON manufactured pads or cord with this unit).
4. Automatic **15 minute shut off**.
5. **The lights** let you clearly control your therapy with mode, intensity level.
6. **Battery Light** lights up to remind you to replace the batteries.
7. **Pad Light** blinks if pad(s) falls off.

### BUTTONS AND THEIR FUNCTIONS

#### Mode Light

Each light corresponds to a mode.

(☞ Page 22 and the Back of Main Unit)

#### Mode/Intensity Button

Select mode and intensity according to your needs.

1. Press ▲/▼ to choose mode.  
(☞ Page 21)
2. After selecting the mode:  
Press ▲ for higher intensity.  
Press ▼ for lower intensity.  
(☞ Page 23)

#### Cord Jack

#### Intensity Light

(☞ Page 23)

#### Power Button

Press once for “ON” and again for “OFF”.

#### Pad Light

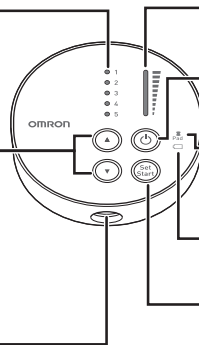
If the pad dislodges, Pad Light will blink.  
(☞ Page 30)

#### Battery Light

If the battery is low, Battery Light will light up.

#### Set/Start Button

After choosing the mode: Press Set/Start to select the mode. (☞ Page 21)



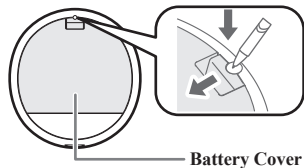
## ASSEMBLY STEPS

Before using your unit, inspect these things.

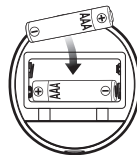
1. Cord is not broken.
2. Pad gel is not damaged.
3. Electrode cord connection is not broken.
4. Unit is intact and working.
5. There is no battery leakage.

### STEP 1 – INSERT BATTERIES

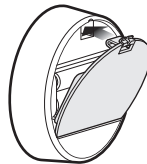
- 1 Remove the battery cover using a hard object (such as the tip of a pen, thin screwdriver).



- 2 Insert batteries. Make sure the  $\oplus$   $\ominus$  signs correspond when inserting batteries.



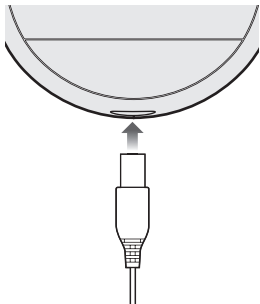
- 3 Reinstall the battery cover.



## ASSEMBLY STEPS

### STEP 2 – ATTACH ELECTRODE CORD TO THE MAIN UNIT

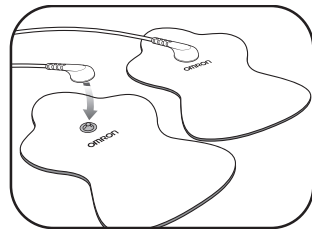
Attach the electrode cord plug to the bottom of the main unit.



### STEP 3 – SNAP EITHER ELECTRODE CORD TO EACH OF THE PADS

For the first time, take the pads out of the sealed package.

- ⚠ Do NOT turn unit on, until pads are on your skin.
- ⚠ You MUST USE BOTH PADS or stimulation will not work.



#### NOTE:

Pads will not stick if the skin has too much hair. We recommend shaving the area for effective treatment.

## ASSEMBLY STEPS

### STEP 4 – REMOVE AND DISCARD PLASTIC FILM FROM PADS

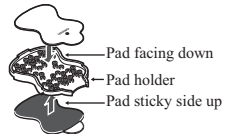
For the first time, remove the clear plastic film from the back of the pad.

Discard the plastic film backing as well as the clear packaging.



### STORING PADS ON PAD HOLDER

Remove plastic film and put sticky side of pads on either side of the pad holder.





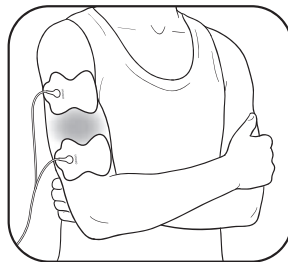
## GET STARTED WITH YOUR THERAPY

(USE FOR A MAXIMUM OF 30 MINUTES PER SESSION)

### STEP 1 – PAD PLACEMENT

For optimal therapy:

- ⚠ Place pads on either side of the pain, not directly on the pain.
- ⚠ Place pads at least 2.5 cm apart.
- ⚠ **MUST USE TWO PADS** at a time for therapy to work.
- ⚠ Do not overlap pads or put on top of each other.
- ⚠ Do not add spray, lotions or creams to skin or pads.
- ⚠ Do not share pads.

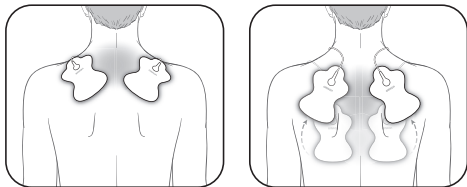


### ARM

Attach both pads on either side of the region where you feel pain.

## GET STARTED WITH YOUR THERAPY

### STEP 1 – PAD PLACEMENT (continued)

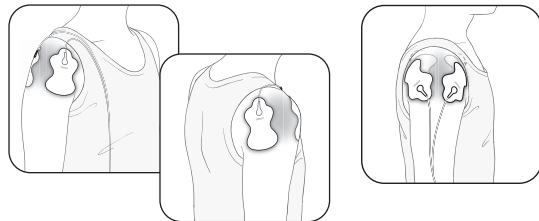


#### SHOULDER

Attach both pads on the shoulder according to your pain.



⚠ Do not use near the heart, on both sides of the thorax or across your chest because the introduction of electrical current may cause rhythm disturbances which could be lethal.

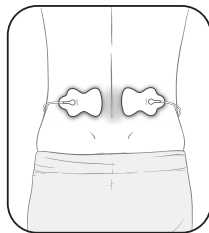
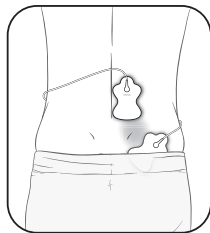
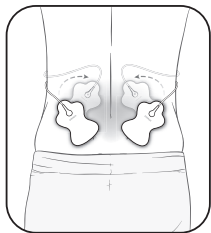
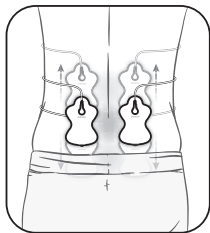


#### SHOULDER

Attach one pad on the front and on the back of your shoulder.

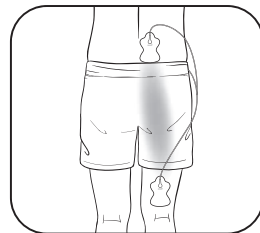
## GET STARTED WITH YOUR THERAPY

### STEP 1 – PAD PLACEMENT (continued)



#### LOWER BACK

Attach both pads on the lower back according to your pain.  
Place pads on muscle of back, not on spine, for optimal therapy.

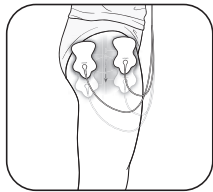


#### LOWER BACK

Attach one pad below and above the region in pain,  
both on same side.

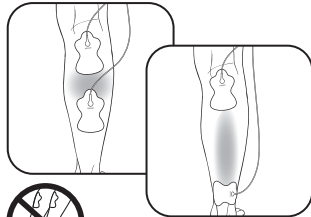
## GET STARTED WITH YOUR THERAPY

### STEP 1 – PAD PLACEMENT (continued)



#### **LEG (HIP & THIGH)**

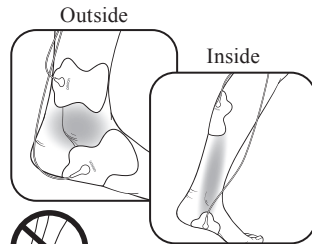
Attach both pads on either side of the area with pain.



#### **LEG (CALF)**

Attach both pads on the calf where you feel pain.

⚠ Pads should **not** be placed simultaneously on the calves of both legs.



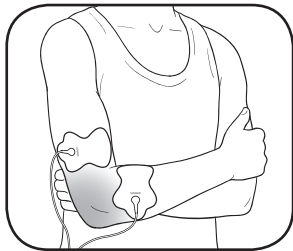
#### **FOOT (ANKLE)**

Attach pads on the left for pain on the outside of your ankle/foot. Attach the pads on the right for pain on the inside of your ankle/foot.

⚠ Do not put the pads on the bottom of both feet at the same time.

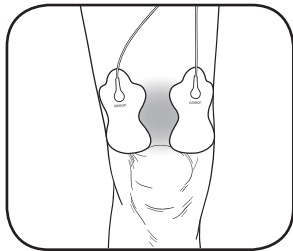
## GET STARTED WITH YOUR THERAPY

### STEP 1 – PAD PLACEMENT (continued)



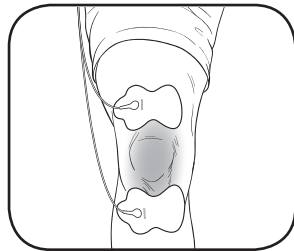
#### **JOINT (ELBOW)**

Attach both pads on either side of the joint with the pain.



#### **JOINT (KNEE)**

Attach both pads above the knee or above and below the joint with pain.



## GET STARTED WITH YOUR THERAPY

### STEP 2 – SELECT 1 OF 5 MODES

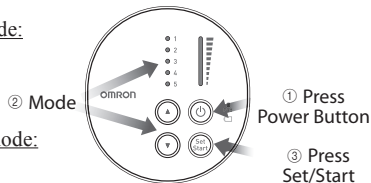
- ① Press the Power button.
- ② Press ▲(Up) or ▼(Down) button to choose 1 of the 5 modes.  
**Modes cannot be combined.**
- ③ Press the Set/Start button to select the mode. It will start the therapy at the intensity level of 1.

#### Select a treatment mode:

1. Arm/Shoulder
2. Lower Back
3. Leg/Foot

#### Or select a massage mode:

4. Knead
5. Steady



#### How to change modes during therapy?

If you want to change modes during therapy, press the Set/Start button and ▲(Up) or ▼(Down) button to select a new mode. You can only use ONE MODE at a time.

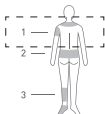
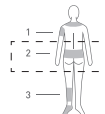
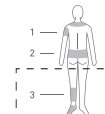


If you don't press the Set/Start button to select the mode, the unit will automatically turn off after 3 minutes.

#### How to select the right mode?

Any of the modes can be used on body parts or pains described in this manual or Quick Start Guide/Pad Placement Guide. Select the mode that feels right for your unique pain.

## GET STARTED WITH YOUR THERAPY

### STEP 2 – SELECT 1 OF 5 MODES (continued)

Therapies designed for	Arm/Shoulder	Lower Back	Leg/Foot	Knead	Steady
Mode Light and the Back of Main Unit	<ul style="list-style-type: none"> <li>● 1</li> <li>○ 2</li> <li>○ 3</li> <li>○ 4</li> <li>○ 5</li> </ul> 	<ul style="list-style-type: none"> <li>○ 1</li> <li>● 2</li> <li>○ 3</li> <li>○ 4</li> <li>○ 5</li> </ul> 	<ul style="list-style-type: none"> <li>○ 1</li> <li>○ 2</li> <li>● 3</li> <li>○ 4</li> <li>○ 5</li> </ul> 	<ul style="list-style-type: none"> <li>○ 1</li> <li>○ 2</li> <li>○ 3</li> <li>● 4</li> <li>○ 5</li> </ul> 	<ul style="list-style-type: none"> <li>○ 1</li> <li>○ 2</li> <li>○ 3</li> <li>○ 4</li> <li>● 5</li> </ul> 
Potential conditions	Stiffness, sore or achy, tight feeling.	Stiffness, soreness, muscle spasm, nerve pain.	Swelling, fatigue, chilly feeling, sore or achy.	Stiffness, soreness, tight feeling.	Stiffness, soreness, tight feeling, or achy.
What does the therapy deliver?	Series of low to high rate tapping, pulsing, kneading and massage-like sensations.	Series of high rate to low tingling sensations, followed by tapping. With higher intensity, you may feel kneading or massage-like sensations.	Series of low rate tapping, pulsing sensations.	Series of medium rate pulsing sensations to mimic massage.	Series of regular pulsing sensations that do not change.

## GET STARTED WITH YOUR THERAPY

### STEP 3 – SELECT INTENSITY LEVEL (1 LOW – 10 HIGH)

The unit automatically starts at the intensity level of 1. Slowly increase the intensity level by pressing ▲(Up) button. You should feel a gentle pulsing sensation.

#### How do I select the right intensity level for my pain?

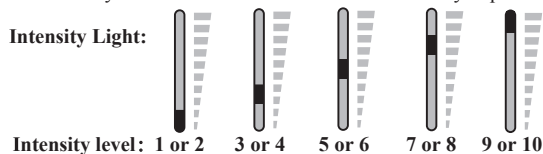
Each time you press ▲(Up) or ▼(Down) button, it moves to another level. If the stimulation sensation becomes weaker or disappears, increase the intensity. But, if the sensation is at all uncomfortable, press ▼(Down) button to decrease the intensity.

- Press ▲ for higher intensity.
- Press ▼ for lower intensity.

If Pad Light is blinking, the unit will automatically turn off after 30 seconds. (☞ “TROUBLE SHOOTING” on page 28)

#### What intensity level is my unit on?

Press ▲(Up)/▼(Down) button to increase/decrease the intensity. The Intensity Light moves up/down after pressing it once or twice (as shown below). Therefore, the light may not move up/down, but the intensity level does increase/decrease each time you press it.



#### How long is the therapy?

The unit will continue automatically for 15 minutes before it shuts off. If you want to stop the therapy while in use, press the Power button. We recommend a total of 30 minutes therapy in one sitting, up to 3 times/day.



## HOW TO CONTROL AND REDUCE YOUR PAIN

### When should you start therapy?

Use as soon as your pain begins. Start with one session (the unit automatically turns off at 15 minutes).

### Get to your pain early

If you get to your pain early, it may prevent the pain from becoming worse, or even chronic. It's better for you to get it under control sooner so that it does not reach a high pain threshold where it limits your daily activities.

### How long should you use it?

Start with one 15 minute session. Always turn unit off with pads still on. Rate your pain to check your progress, 1 low to 10 high. Stop therapy session if pain has reduced or stopped. Press the Power button to continue therapy for another 15 minute session.

1 session	Max minutes/session	Max times/day
15 minute automatic shut-off	30 minutes	3 times

⚠ See warnings on page 9. Long-time treatment and strong stimulation may cause muscular fatigue and may generate adverse effects.

### When to stop using the unit?

1. If you experienced an **adverse reaction** (skin irritation/redness/burns, headache or other painful sensation, or if you feel any unusual discomfort).
2. If your pain **does not improve**, becomes seriously chronic and severe, or continues **for more than five days**.

## HOW TO CONTROL AND REDUCE YOUR PAIN

### What type of pain is it best for?

This therapy works best on acute pain because it is localized. Acute pain is pain in one area for less than 3 months. If you have chronic pain, you may have pain in more than one area and for longer than 6 months. Chronic pain may be compounded by other issues that this unit cannot address.

Remember, this unit does not cure your pain or the original cause of the pain. It provides temporary relief or reduction of pain so that you can control your life and activities better.

**Before using, check these points to make sure everything is working properly.**

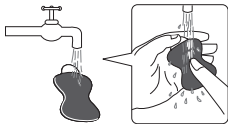
- 1. Make sure the cord is not broken.**
- 2. Check that the pad adhesive sticks and is not damaged.**
- 3. The electrode cord connection is not broken.**
- 4. The unit is intact and in working order.**
- 5. There is no battery leakage.**

## CLEANING AND STORAGE

**The unit is designed for repeated use over time. The pads will last up to 150 uses, or 5 months (based on use 1/day). Here are important cleaning and storage instructions:**

### Cleaning the pads

1. Turn the power off and remove the electrode cord from the pads.
2. Wash the pads when the adhesive surface becomes dirty and/or the pads are difficult to attach.
  - Wash the pad softly with your fingertips under slow running cold water for several seconds (do not use a sponge/ cloth/sharp object like a nail on adhesive side, do not use detergents, chemicals or soap).



3. Pads can be washed after 15 uses, approximately ten times for up to 150 uses. Do not wash the pads too long or too frequently.
  4. Dry the pads and let the adhesive surface air-dry completely. Do not wipe with a tissue paper or cloth.
  5. **Pads are replaceable and can be purchased. Please consult your local OMRON representatives.**
- The life of the pads may vary by how often you wash the pads, the skin condition, and how you store the pads.

### When should you replace your pads?

If the pad no longer sticks to your skin or if more than 25% of the pad's surface is not in contact with your skin.

## CLEANING AND STORAGE

### Cleaning the unit

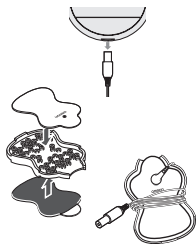
1. Turn unit off and disconnect the electrode cord from the pads.
2. Clean with a lightly moistened cloth (or a cloth soaked in a neutral cleaning solution) and wipe gently.
  - Do not use chemicals (like thinner, benzene).
  - Do not let water get into the internal area.

### Storing the pads

1. Turn the unit off and remove the cord from the bottom of the unit.
2. Remove the pads from your body.
3. **Leave the electrode cord connected to the pads.**

Place the pads on the pad holder, one pad on each side with the sticky side of each pad on the pad holder.

4. **Wrap the electrode cord around the pad holder.**



### Storing the unit and pads

- Place the unit, pads with electrode cord on pad holder, Pad Placement Guide and Instruction Manual inside the original box.
- Do not keep in areas subject to direct sunlight, high or low temperatures, humid area, near to fire, vibration, or shock.

Storage temperature, 0°C to 40°C,  
30% - 80% relative humidity.

- **Do not keep at places that can be easily reached by children.**
- When not in use for a long period, remove the batteries before storage, to avoid liquid discharge from batteries.
- Do not wrap the electrode cord around the unit because it may damage the cord.




## TROUBLESHOOTING

In case of any of the below problems occurs during use, first check that no other electrical device is within 30cm. If the problem persists, refer to the table below.


<b>If this happens...</b>	<b>Possible causes...</b>	<b>Try this solution...</b>	<b>If this happens...</b>	<b>Possible causes...</b>	<b>Try this solution...</b>
<b>The intensity is not felt. Very weak intensity level.</b>	Are you using only 1 pad?	Put the other pad on your skin. You must use BOTH PADS for therapy to work.	<b>The intensity is not felt. Very weak intensity level.</b>	Are the batteries weak?	Replace both “AAA” batteries.
	Have you removed the transparent film from the pad?	Peel off film on the adhesive surface of pads.		Is the intensity “1”?	Press the ▲(Up) button.
	Are the pads stacked together or do pads overlap?	Check placement of pads. Refer to Pad Placement Guide.	<b>The skin turns red or the skin feels irritated.</b>	Is the adhesive surface of pads dirty or dry?	Wash adhesive surface of pads softly with your fingertips for about 3 seconds under slow running water.
	Is the cord properly connected to the unit?	Connect cord plug correctly into the jack at bottom of this unit.		Is therapy time too long?	Use less than 15 minutes.
	Is the intensity setting getting weak?	Press the ▲(Up) button.		Are the two pads attached properly to the body?	Refer to the Pad Placement Guide and attach correctly.
	Is the gel damaged?	Replace pad.			


## TROUBLESHOOTING

If this happens...	Possible causes...	Try this solution...
<b>The skin turns red or the skin feels irritated.</b>	Is the pad surface worn out?	Replace both pads at the same time.
<b>No power source.</b>	Are the polarities of battery (+ and -) aligned in the wrong direction? or Are the batteries depleted?	Check batteries for correct alignment. or Replace batteries.
<b>Power cut off during use.</b>	Are the batteries weak?	Replace both batteries at the same time.
	Is the cord broken?	Replace cord.
<b>Battery Light lights up.</b> 	Are the batteries weak?	Replace both batteries at the same time.

If this happens...	Possible causes...	Try this solution...
<b>Pad gel does not stick to skin.</b>	Have you removed the transparent film from the pad?	Peel off film on the adhesive surface of pads.
	Is the pad wet? or Is your skin too wet?	Dry the pad. or Dry the skin.
	The pad gel may be damaged.	Replace the pad.
	Is there too much hair on your skin?	Shave the immediate area for proper pad adhesion.
	Is the adhesive surface of pads dirty or dry?	Wash adhesive surface of pads softly with your fingertips for about 3 seconds under slow running cold water.

## TROUBLESHOOTING

If this happens...	Possible causes...	Try this solution...
<b>Pad gel does not stick to skin.</b>	Are you using pad during perspiring?	Dry the pad placement area.
	Have the pads been washed too long and/ or too frequently?	Leave the pad in freezer for overnight.
	Were the pads stored under high temperature, high humidity, or direct sunshine?	Replace both pads.
<b>Pad Light is blinking.</b> 	Are both pads attached to the body?	Re-attach dislocated pad(s) onto the skin firmly.

If this happens...	Possible causes...	Try this solution...
<b>Pad Light is blinking.</b> 	Have you removed the transparent film from the pad?	Peel off film on the adhesive surface of pads.
	Is the cord properly connected to the main unit?	Connect cord plug correctly into the jack at the bottom of the main unit.
	Is the adhesive surface of pads dirty or dry?	Wash adhesive surface of pads softly with your fingertips for about 3 seconds under slow running cold water.
If the above measures are not effective, please consult your local OMRON representatives.		

## SPECIFICATIONS

Product Description	Electronic Nerve Stimulator
Model (code)	HV-F013(HV-F013-AP)
Electrical Characteristics	3V $\text{---}$ (with two alkaline “AAA” batteries [LR03] or manganese [R03])
Battery Life	New batteries (two AAA alkaline batteries) will last for approx. 3 months (when used for 15 minutes a day, Lower Back Mode, max. intensity).
Energy Consumption	Approx. 30mA
Frequency	Approx. 1 to 108Hz
PULSE Duration	100 $\mu$ sec
Maximum Output Voltage	32V (during 500 $\Omega$ load)
Power Control	10 intensity levels
Operating Temperature, Humidity (When using product)	10 °C to 40 °C, 30 to 80% RH
Storage Temperature, Humidity	0 °C to 40 °C, 30 to 80% RH
Transportation Temperature, Humidity, Air Pressure	-20 °C to 60 °C, 10 to 95% RH, 700 to 1060 hPa
Weight	Approx. 75g (incl. batteries)

Outer Dimension (Width × Height × Depth)	Approx. 75 × 70 × 22mm
Classification of ME equipment	Internally powered
IP classification	IP 22*
Contents	Main Unit, Electrode Cord, Long Life Pads, Pad Holder, 2 “AAA” Batteries(LR03), Instruction Manual, Quick Start Guide/Pad Placement Guide

This OMRON product is produced under the strict quality system of OMRON HEALTHCARE Co. Ltd., Japan.  
Designed for a minimum of 5 years life expectancy.

\* **IP22** IP classification is degrees of protection provided by enclosures in accordance with IEC 60529. This device is protected against solid foreign objects of 12.5 mm diameter and greater such as a finger. This device is protected against oblique falling water drops which may cause issues during a normal operation.









**NOTE:** These specifications are subject to change.







### Accessories/replacement parts

Long Life Pads .....Model Number : HV-LLPAD

**CE 0197** This device fulfils the provisions of EC directive 93/42/EEC (Medical Device Directive).

Description of symbols that, depending on a model, can be found on the product itself, product sales package or IM			
	This product should not be used by persons with medical implants, e.g. heart pacemakers, artificial heart, lung or other electronic life support systems.		
	Applied part - Type BF Degree of protection against electric shock (leakage current)		Date of manufacture
IP XX	Ingress protection degree provided by IEC 60529		Temperature limitation
	Serial number		Need for the user to consult the instructions for use
	CE Marking		Class II equipment

	Humidity limitation		Atmospheric pressure limitation
	Direct current		recycling mark

Product production date is printed on the unit and a label which is placed on the sales package: the first 4 digits mean year of production, the next 2 digits - month of production.

**Important information regarding Electro Magnetic Compatibility (EMC)**

HV-F013 manufactured by OMRON HEALTHCARE Co., Ltd. conforms to EN60601-1-2:2015 Electro Magnetic Compatibility (EMC) standard.

Further documentation in accordance with this EMC standard is available at <http://www.omronhealthcare-ap.com/emc-information>. Refer to the EMC information for HV-F013 on the website.

## **Correct Disposal of this Product (Waste Electrical & Electronic Equipment)**



This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

This product does not contain any hazardous substances.

Disposal of used batteries should be carried out in accordance with the national regulations for the disposal of batteries.

<b>Manufacturer</b> 	<b>OMRON HEALTHCARE Co., Ltd.</b> 53, Kunotsubo, Terado-cho, Muko, KYOTO, 617-0002 JAPAN
<b>EU-representative</b> <div style="border: 1px solid black; display: inline-block; padding: 2px;"> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">EC</div> <div style="border: 1px solid black; padding: 2px;">REP</div> </div>	<b>OMRON HEALTHCARE EUROPE B.V.</b> Scorpius 33, 2132 LR Hoofddorp, THE NETHERLANDS
<b>Production facility</b>	<b>OMRON DALIAN Co., Ltd.</b> Dalian, China
<b>Asia Pacific HQ</b>	<b>OMRON HEALTHCARE SINGAPORE PTE LTD.</b> 438A Alexandra Road, #05-05/08, Alexandra Technopark Singapore 119967 <a href="http://www.omronhealthcare-ap.com">www.omronhealthcare-ap.com</a>

**Made in China**

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