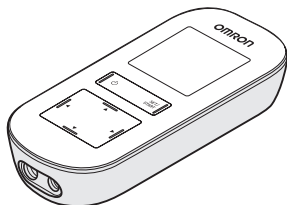


**OMRON**



# **Electronic Nerve Stimulator HV-F311**

## **Instruction Manual**

5655010-5D  
Issue Date: 2022-12-05

## Table of Contents

### Before Using the Device

Introduction .....	2	STEP 4 – Pick Heat Setting.....	21
Important Safety Precautions and Warnings .....	4	STEP 5 – Pick 1 out of 9 TENS Modes .....	22
Know Your Device.....	11	STEP 6 – Select the Preferred Intensity Level (1 low - 20 high) .....	25
Package Contents.....	11	How to Manage and Reduce Your Pain .....	26
Optional Medical Accessories .....	11	When should I start therapy?.....	26
Buttons and Their Functions.....	12	Get to your pain early.....	26
Inspect Device and Charge Battery .....	13	How long should I use it? .....	26
STEP 1 – Connect the AC Adapter to the Jack on the Device.....	13	When to stop using the device?.....	26
STEP 2 – Insert the Power Plug into an Electrical Outlet .....	13	<b>Maintenance</b>	
Battery Icon.....	14	Maintenance .....	27
STEP 3 – Unplug the Power Plug and the AC Adapter Jack once the Battery is Fully Charged .....	14	Maintenance.....	27
<b>Operating Instructions</b>		Wiping the Dirt .....	27
Assembly Steps .....	15	Storage.....	28
STEP 1 – Prepare Pads.....	15	Service .....	29
STEP 2 – Place Gels onto the Pads.....	15	<b>Troubleshooting.....</b>	<b>30</b>
Get Started with Your Therapy .....	16	<b>Technical Data.....</b>	<b>35</b>
STEP 1 – Attach the Pads to the Body.....	16	<b>Guidance and Manufacturer’s Declaration .....</b>	<b>39</b>
STEP 2 – Pad Placement .....	17		
STEP 3 – Pick your Preferred Therapy.....	20		

## Introduction

Thank you for purchasing the OMRON Electronic Nerve Stimulator.

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

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

This box contains the following components:

- Main Unit
- 2 Pairs of Gels
- Cord with Pads
- Instruction Manual
- Pad Holder
- AC Adapter
- Warranty Card

### **How does TENS and HEAT work?**

Physical therapists have been using the combination of heat and TENS for decades. The HEAT warms and relaxes the muscle for soothing relief while improving the blood circulation. OMRON Electronic Nerve Stimulator uses Triple Action TENS (Transcutaneous Electrical Nerve Stimulation) technology that helps to:

- block the pain message
- trigger the release of endorphins (natural pain killers)
- improve the blood circulation (as result of repeated muscle contracting and relaxing)

### **Intended Use**

#### **Medical purpose**

OMRON Electronic Nerve Stimulator intended for reducing and relieving muscle, nerve and joint pain, stiffness, fatigue and numbness in the back, arms, legs, shoulders and feet by applying electrical nerve stimulation to the surface of the skin near the site of the pain.

The Electronic Nerve Stimulator offers both soothing heat and relieves pain using TENS technology. It should be applied to normal, healthy, dry, and clean skin of adult patients.

## Introduction

---

Any of the modes can safely be used on body parts or pains described in this manual. Just find one that feels good and is comfortable for your pain. It can be successfully used in conjunction with any other pain treatment or medication on the advice of your healthcare professional. Since the 1970s, pain relief based on TENS has been widely used by many healthcare professionals, such as physiotherapists and pain specialists.

### **Intended User**

This device is intended to be operated by adults who can understand this instruction manual. It is intended for home use.

## Important Safety Precautions and Warnings

### Read the Important Safety Information in this instruction manual before using this device.

Follow this instruction manual thoroughly for your safety.

#### Danger

Improper use may cause danger resulting in death or serious injury. These are situations in which the device should not be used.

#### Do not use this device with these other devices:

- 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.
- Together with another TENS device.
- Together with a life-supporting medical electronic device such as an artificial heart or lung or respirator.



- 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.
- Simultaneous connection of a patient to a high frequency surgical Medical Electronic 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 Medical Electronic equipment may produce instability to the stimulator output.

### **Warning**

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.






### **Consult with your healthcare professional before using this device under these conditions.**



- The device may cause lethal rhythm disturbances in certain susceptible individuals. If you have had a recent surgical procedure, the stimulation may disrupt the healing process.
- If you have had medical or physical treatment for your pain.
- If you have suspected or diagnosed heart disease or epilepsy.

### **Do not use on these individuals**

- Pregnant women.
- Do not use on children under 15 years old because this device has not been evaluated for pediatric use.
- Keep out of the reach of young children. The electrode cord could cause strangulation and the device contains small pieces that may be swallowed.
- Persons incapable of expressing their thoughts or intentions.
- Persons incapable of operating the device by themselves.
- Use caution if you have a tendency to bleed internally, such as following an injury or fracture.

**Never apply the pads to these body areas:**

	The head, the mouth, or any area of the face.
	The neck or any area of the throat 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.
	Do not use near the heart, or on genital area.
	Both sides of the thorax simultaneously (lateral or front and back), or across your chest
	because the introduction of electrical current may cause rhythm disturbances which could be lethal.

	On both legs at the same time because this may cause cardiac disturbance.
	On the bottom of both feet 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 device 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.
- While exercising or sweating.

## Important Safety Precautions and Warnings

---

### **Warnings while using the device**

- Do not use this device on or near any other heating device, heating element.
- Do not use this device under a blanket.
- Do not use heat on any muscle or joint which has swelling or edema. It may worsen the pain or condition.
- Do not use on sensitive skin areas or in the areas with poor blood circulation.
- Do not use heat function if you are a patient with a lack of temperature sensation.
- If used on the elderly, use caution due to more sensitivity of the skin.
- If the product feels too hot, stop use immediately.
- Do not plug the cord with pads into any other device that is not an Electronic Nerve Stimulator.
- Do not modify this device.
- Use this device only with OMRON supplied AC Adapter, cord and accessories.

- If your pain does not improve, becomes seriously chronic or severe, or continues for more than 5 days, stop using the device and consult your healthcare professional.
- Pain is a warning from the body that something is wrong.
- If you experience adverse reactions from the device, stop using it.

### **Warnings regarding the cord**

- Do not pull on the cord during treatment.
- Do not bend or pull the end of the cord.

### **Warnings regarding the pads**

- Apply pads only to normal, intact, clean, healthy skin.
- If you experience any skin irritation or redness after a session, do not continue stimulation in that area of the skin.
- The pads can only be used with OMRON gels.
- The pad with gel should not come in contact with any water during therapy.
- Do not apply the pads incorrectly or by using excessive pressure, because discomfort or skin burns may occur.



- Never bend or fold the pads.
- Do not wash the cord with pads with running water.
- Before use, inspect the cord with pads for open wires or any damage. If damaged, do not use and replace immediately. The damaged cord with pads may cause skin burns or a fire.
- Replace the cord with pads when broken or damaged.

### AC Adapter Handling and Usage

- Never plug in or unplug the AC adapter from the electric outlet with wet hands.

### Battery Handling and Usage

- To prevent the risk of overheating, fire or explosion:
  - Do not puncture, crush, disassemble or modify the device.
  - Do not throw the device into fire.
  - Do not recharge, use, or leave the device in any high temperature environment such as in a location near a fire or in direct sunlight.

- The device contains a built-in rechargeable Lithium-Ion battery which must be disposed of properly. **Dispose of the device according to applicable local government regulations.**

#### Caution

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient, or cause damage to the equipment or other property.

### Precautions regarding the pads

- Do not move the pads to another location while the device is on.
- 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.
- Pads should not touch any metal object, such as a belt buckle, necklace, or other metal worn under clothing.
- Do not share pads with another person. This may cause a skin irritation or infection. Pads are intended for use by one person.

## Important Safety Precautions and Warnings

---

- Do not leave pads attached to the skin after treatment.
- 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 17-19, 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 pads do not work correctly without the gels. For safety and effectiveness, they must be used together.
- Place pads on either side of the pain, not directly on the pain.
- Place pads at least 2.5 cm apart for optimal results.
- For therapy to work, always use two pads.
- Do not overlap pads or put them on top of each other.
- Do not apply the pad with wet hands, and do not apply the pads that are wet.

### **Caution while using the device**

- Use caution if stimulation is applied over the menstruating uterus.
- If the device is not functioning properly or you feel discomfort, immediately stop using the device.
- 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 device.
- Do not use the device without proper lighting. You may not be able to operate the device successfully.
- While using this device, make sure that no mobile device or any other electrical device that emit electromagnetic fields is within 30 cm. This may result in degradation of performance of the device.

### **Cautions regarding the cord**

- Do not insert the cord plug into any place other than the jack on the device.
- When pulling out the cord from the device, hold the plug and pull.

### **General precautions**

- The long-term effects of electrical stimulation are unknown.
- 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 is a symptomatic treatment and, as such, suppresses the sensation of pain that would otherwise serve as a protective mechanism.
- Ensure that this device has acclimated to room temperature before using. Using this device after an extreme temperature change could lead to an improper operation. OMRON recommends waiting for approximately 2 hours for the device to warm up or cool down when the device is used in an environment within the temperature specified as operating conditions after it is stored either at the maximum or at the minimum storage temperature. For operating, storage

conditions, refer to “Technical Data” on page 35.

### **Possible adverse reactions**

- Do not use to treat one region for extended periods of time (more than one 30-minute session, up to 3 times/day). Muscles in that region may become exhausted and sore.

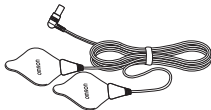
## Know Your Device

### Package Contents

Main Unit



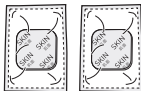
Cord with Pads



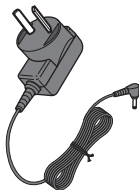
Pad Holder



Gels (2 pairs)



AC Adapter (HHP-OH11)



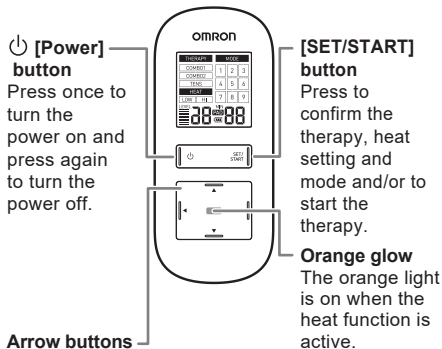
Instruction Manual

Warranty Card

### Optional Medical Accessories

Product description	Model
Gels (Contents: 4 pairs)	HV-PAD-3AP

## Buttons and Their Functions

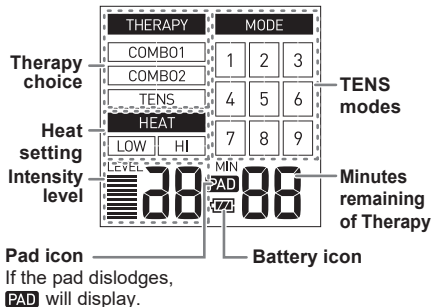
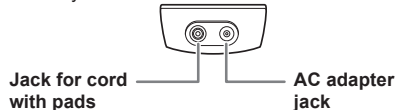


### Arrow buttons

Set according to your needs.

Press ▲ (up) or ► (right) for higher TENS intensity or heat.

Press ▼ (down) or ◀ (left) for lower TENS intensity or heat.



## Inspect Device and Charge Battery

Before using, check that:

1. The cord is not broken.
2. The gels are not damaged.
3. The connection between cord and pad is not damaged.
4. The device is intact.

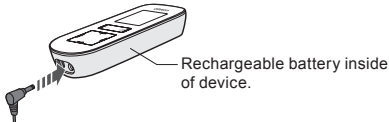
### Before first time use:

We recommend charging the battery to a full 100 % charge. It takes about 5 hours to charge once battery is empty.

Once fully charged, the battery will last for 4 times of 30 minutes uses on average.

**Note:** If you have not used the device for 3 months, recharge the battery.

## STEP 1 – Connect the AC Adapter to the Jack on the Device




## STEP 2 – Insert the Power Plug into an Electrical Outlet







- When charging the battery, the battery icon blinks on the display.



- When fully charged, the battery icon will display shortly on the display, then the power will turn off. Press the  [Power] button to see if the battery is fully charged.

## Battery Icon

**Note:** While the battery is charging, the device does not work.

Display	Contents
	Battery charge is full.
	Battery charge is half.
	Battery is close to low.
	Battery is depleted.

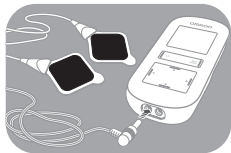
## STEP 3 – Unplug the Power Plug and the AC Adapter Jack once the Battery is Fully Charged



## Assembly Steps

### STEP 1 – Prepare Pads

Put the cord plug into the jack on the bottom left side of the device.



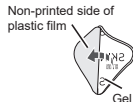
**Note:** Do not turn the device on until pads are on your skin.

### STEP 2 – Place Gels onto the Pads

- Remove the gels from the sealed plastic bag.

**Note:** Each gel has a film on each side of the gel. One film is non-printed, the other side has text (“SKIN”).

- Remove the non-printed side of plastic film.

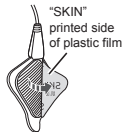


- Place the gels onto the black side of the pads.



**Note:**

- Make sure the gel lays evenly and securely with no bubbles, bending or missing pieces.
- The “SKIN” printed side of plastic film is on top.

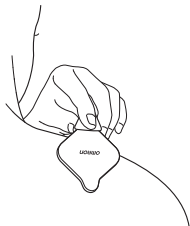




## Get Started with Your Therapy

### STEP 1 – Attach the Pads to the Body

- Remove the “SKIN” printed side of plastic film and place the pads onto the skin.



#### Note:

- Wipe all lotions/oils/sweat/ointment and dry the applicable skin area.
- Make sure that pads stick to the skin.

For optimal therapy:

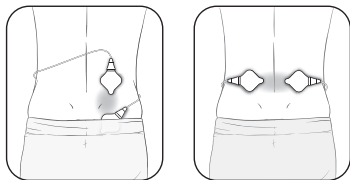
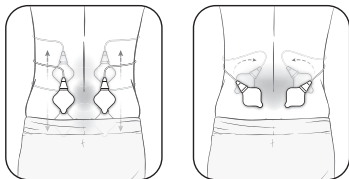
#### Caution

---

- Place pads on either side of the pain, not directly on the pain.
- Place pads at least 2.5 cm apart for optimal results.
- For therapy to work, always use two pads.
- Do not overlap pads or put them on top of each other.

**Note:** Unplug the AC Adapter when using the device.

## STEP 2 – Pad Placement



### LOWER BACK

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



### LOWER BACK

Attach 1 pad below and above the region in pain, both on same side.



### ARM

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



### JOINT (ELBOW)

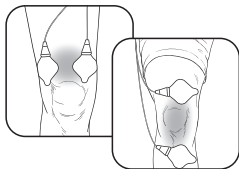
Attach both pads on either side of the joint with pain.



### LEG (HIP & THIGH)

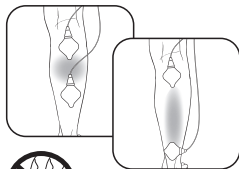
Attach both pads on either side of the area with pain.

## STEP 2 – Pad Placement (continued)



### JOINT (KNEE)

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

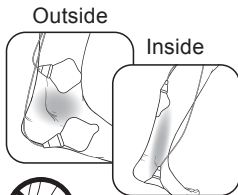


### LEG (CALF)

Attach both pads on the calf with pain.

#### **Warning**

- Do not apply the pads on both legs at the same time because this may cause cardiac disturbance.



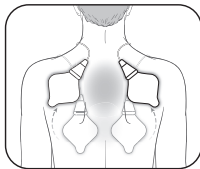
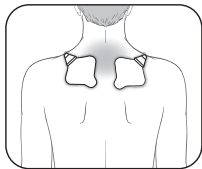
### FOOT (ANKLE)

Attach the 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.

#### **Warning**

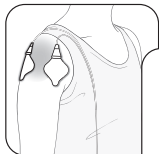
- Do not apply the pad on the bottom of both feet at the same time because this may cause cardiac disturbance.

## STEP 2 – Pad Placement (continued)



### SHOULDER

Attach both pads on the shoulders according to your pain.



### SHOULDER




Attach 1 pad on the front and on the back of your shoulder.



### Warning

- Do not apply the pads on both sides of the thorax simultaneously (lateral or front and back), or across your chest because the introduction of electrical current may cause rhythm disturbances which could be lethal.

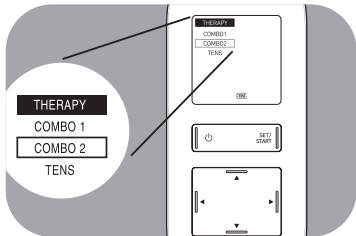
## STEP 3 – Pick your Preferred Therapy

Press the  [Power] button to turn the power on. Select 1 out of 3 therapies using the   (up/down) arrow buttons. Next, press the [SET/START] button to confirm therapy.

**Note: All therapies automatically stop after 30 minutes.**

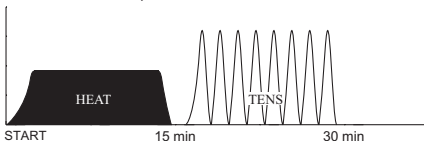
**To change therapies, turn the power off, then turn it on again.**

### 3 Therapies Available



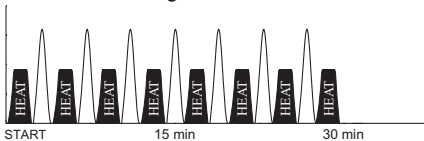
#### COMBO1 Therapy

-HEAT 15 min, TENS 15 min



#### COMBO2 Therapy

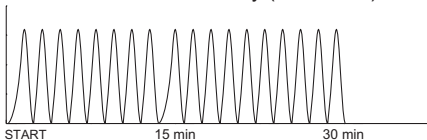
-Short sessions of HEAT / TENS / HEAT / TENS alternating for 30 min.



## Get Started with Your Therapy

### TENS Therapy

-Electrical Stimulation only (for 30 min).

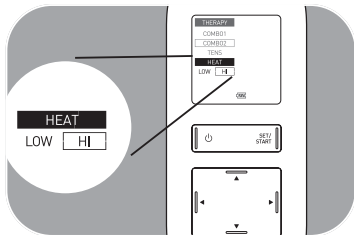


### STEP 4 – Pick Heat Setting

Select [HEAT LOW] or [HEAT HI] using the ◀▶ (left/right) arrow buttons. Next, press the [SET/START] button to confirm heat setting.

**Note: Heat setting applies only to**

COMBO1 / COMBO2 Therapies.

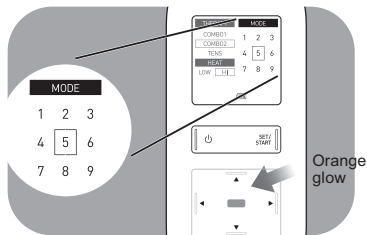


**Note: HEAT LOW: Approx. 42 °C**  
**HEAT HI: Approx. 43 °C**  
Actual temperature that is experienced/felt may vary due to skin condition, age, location of pain and more.

## STEP 5 – Pick 1 out of 9 TENS Modes

Select a TENS mode using the 4 arrow buttons. Next, press the [SET/START] button to confirm the TENS mode.











**Note:** COMB01 & COMB02 Therapies begin with “HEAT”. Orange glow appears when the heat function is on.



## How to select the right TENS mode

Any of the modes can be used on body parts or pains described in this manual. Select the mode that feels comfortable for your pain.

**Note:** See side of device for easy reference of operation.

Symbol Definition	Mode
 Power On / Off	 1 Tap  2 Knead  3 Rub
– Set THERAPY / HEAT / MODE	 4 Arm  5 Lower Back  6 Leg
SET/START – Start THERAPY	
– Change MODE	 7 Foot  8 Joint  9 Shoulder

## **STEP 5 – Pick 1 out of 9 TENS Modes (continued)**

<b>Therapies designed for</b>	Potential conditions	Sensation
<b>Mode 1 - Tap</b>	Stiffness, soreness, tight feeling.	Series of low rate tapping sensations.
<b>Mode 2 - Knead</b>	Stiffness, sore or achy, knotty muscles, tight feeling.	Series of medium rate pulsing sensations to mimic massage.
<b>Mode 3 - Rub</b>	Stiffness, sore or achy, knotty muscles, tight feeling.	Series of high rate pulsing sensations to mimic hands rubbing.
<b>Mode 4 - Arm</b>	Swelling, stiffness, sore or achy, muscle or nerve pain.	Series of low to medium rate tapping, tingling and pulsing sensations.



**STEP 5 – Pick 1 out of 9 TENS Modes (continued)**

Therapies designed for	Potential conditions	Sensation
<b>Mode 5 - Lower Back</b>	Stiffness, soreness, muscle spasm, nerve pain.	Series of high rate to low tingling sensations, followed by tapping. With higher intensity, you may feel kneading or massage-like sensations.
<b>Mode 6 - Leg</b>	Swelling, fatigue, stiffness, muscle or nerve pain.	Series of low to medium tapping and rubbing sensations.
<b>Mode 7 - Foot</b>	Swelling, fatigue, chilly feeling, sore or achy.	Series of low rate tapping, pulsing sensations.
<b>Mode 8 - Joint</b>	Swelling, stiffness, sore or achy.	Series of medium to high rate tapping, pulsing sensations.
<b>Mode 9 - Shoulder</b>	Stiffness, sore or achy, tight feeling.	Series of low to high rate tapping, pulsing, kneading and massage-like sensations.

### STEP 6 – Select the Preferred Intensity Level (1 low - 20 high)

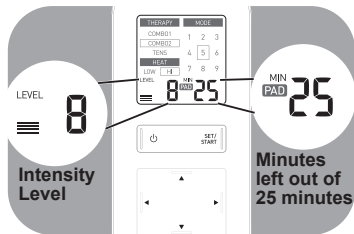
Press the [SET/START] button to start at the lowest intensity level and slowly increase it by pressing the ▲ (up) arrow button. You should feel a gentle pulsing sensation. When the device is in “TENS” stimulation, you can select the preferred intensity level.

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

Select the preferred intensity with the ▲▼ (up/down) arrow buttons. If the stimulation sensation is too weak, increase it with the ▲(up) arrow button to your preference. If the stimulation feels uncomfortable, decrease with the ▼(down) arrow button or try a different TENS mode.

#### Duration of the therapy

The device will operate for 30 minutes before the power automatically turns off. A maximum of one 30-minute therapy per a session, up to 3 times/day, is recommended. The display shows you how many minutes are remaining.



## How to Manage and Reduce Your Pain

### When should I start therapy?

Use as soon as your pain begins. Start with one 30-minute session. Always turn the device off with pads still on the skin.

### 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 I use it?

Start with one 30-minute session. Always turn the device off with pads still on the skin. Rate your pain before and after the therapy to check your progress, 1 low to 10 high. Stop therapy session if pain has reduced or stopped.

### Caution

---

- **Do not use to treat one region for extended periods of time (more than one 30-minute session, up to 3 times/ day). Muscles in that region may become exhausted and sore.**

### When to stop using the device?

Stop using the device:

- If you experienced an adverse reaction (skin irritation/redness/burns, headache or other painful sensation, or if you feel any unusual discomfort).
- If your pain does not improve, becomes seriously chronic and severe, or continues for more than 5 days.

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

If the pain continues, consult your healthcare professional.

## Maintenance

### Maintenance

To protect your device from damage, follow the directions below:

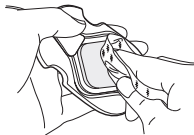
Changes or modifications not approved by the manufacturer will void the user warranty.

### Wiping the Dirt

**Note:** You cannot wipe or wash the gels.

#### • Wiping the cord with pads

1. Remove the gel and discard before wiping the pad.
2. When the pad has become dirty or soiled, wipe the surface with a soft cloth slightly moistened with water or a mild (neutral) detergent.
3. Do not wash the cord and pads with running water.



4. Let air dry before placing new gels onto the pads, do not use old gels.

#### • Wiping the device

1. Turn the device off and disconnect the cord with pads from the device.
2. Wipe with a cloth lightly moistened or soaked in a mild (neutral) detergent and wipe gently.
  - Do not use chemicals (such as thinner, benzene).
  - Do not let water get into the internal area.

#### • When should you replace the gels?

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

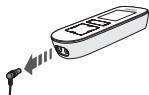
Gels are replaceable and can be purchased.

**Note:** Refer to page 11.

## Storage

### • Storing the pads with gels

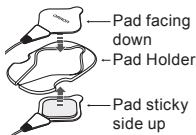
1. Turn the device off.



2. Remove the cord plug from the device, and the pads from your body.

**Note:** Do not wrap the cord around the device because it may damage the cord.

3. Place the sticky side of the gels on either side of the pad holder.



4. Wrap the cord with pads around the pad holder.



### • Storing the device and the pads with gels



Storage temperature  
0 to +40 °C / 30 to 80 % relative  
humidity.

### **Note:**

- Do not keep in areas subject to direct sunlight, high or low temperatures, humid area, near to fire, vibration, or shock.
- Try not to bend or fold the cord with pads and gels during therapy or during storage.
- For information about how to dispose of the device, refer to section “Correct Disposal of This Product” on page 39 and [www.omronhealthcare-ap.com](http://www.omronhealthcare-ap.com)

## Maintenance

---

### **Service**


Please consult your authorised OMRON dealer or the OMRON Customer Service at the address given on the packaging or attached literature.

## Troubleshooting

If any of the below problems occur, check to make sure that no other electrical device is within 30 cm. If the problem persists, refer to the table below.

<b>If this happens...</b>	<b>Possible causes...</b>	<b>Try this solution...</b>
<b>The intensity is too weak or not felt.</b>	Are you using only 1 pad?	Put the other pad on your skin. You must use both pads for therapy to work.
	Have you removed the plastic film from the gels?	Peel off the film on the adhesive surface of gels.
	Are the pads stacked together or do pads overlap?	Check placement of pads. Refer to "Pad Placement".
	Is the cord properly connected to the device?	Connect the cord plug correctly into the jack at the bottom of the device.
	Is the intensity setting too low?	Press the ▲ (up) arrow button.
	Is the gel damaged?	Replace the gel.
	The battery may not have enough charge.	Charge the battery fully.
<b>The skin turns red or feels irritated.</b>	Is the gel dirty?	Replace the gel.
	Therapy time may be too long.	Use less than 30 minutes.
	Are the 2 pads attached properly to the body?	Refer to "Pad Placement" and attach correctly.
	Is the gel surface worn out?	Replace both gels at the same time.


## Troubleshooting




<b>If this happens...</b>	<b>Possible causes...</b>	<b>Try this solution...</b>
<b>The device cannot be turned on.</b>	The battery may be depleted.	Recharge the battery fully.
	Is the AC adapter connected to the device?	While charging, the device does not work. Disconnect the AC adapter from the device.
<b>The device cannot be charged.</b>	The AC adapter is not connected properly.	Check to ensure the AC adapter is properly connected to the device. Check if the AC adapter is connected to an electrical outlet.
<b>Operation stops during use.</b>	The battery charge may be extremely low.	Recharge the battery fully.
	The cord with pads may be broken.	Replace the cord with pads.
	Are you using only 1 pad? <b>PAD</b> is displayed.	Put the other pad on your skin. You must use both pads for therapy to work.
<b>Battery icon shows empty.</b> 	The battery is depleted.	Recharge the battery fully.



<b>If this happens...</b>	<b>Possible causes...</b>	<b>Try this solution...</b>
<b>The gel does not stick to skin.</b>	Have you removed the plastic film from the gels?	Peel off the film on the adhesive surface of gels.
	Is the gel or your skin too wet?	Air dry the gel or dry the skin.
	Is there any lotion/oil/sweat/ointment on skin?	Wipe and dry skin.
	The gel may be damaged.	Replace the gel.
	Is there too much hair on your skin?	Shave the immediate area for proper pad adhesion.
	Were the gels stored under high temperature, high humidity, or direct sunlight?	Replace both gels.
<b>The device or the AC Adapter is abnormally hot when charging the battery.</b>	The device or the AC adapter may be damaged.	Unplug the AC adapter from the electrical outlet and the cord plug from the device immediately.

## Troubleshooting

If this happens...	Possible causes...	Try this solution...
<b>PAD</b> is displayed.	Only 1 pad is attached, or both pads are not attached.	Re-attach dislocated pad(s) onto the skin firmly.
	Was the plastic film removed from the gel?	Peel off the film on the adhesive surface of gels.
	Is the cord properly connected to the device?	Connect the cord plug correctly into the jack at the bottom of the device.
	Is the adhesive surface of gels dirty or dry?	Replace the gels.
<b>The pads are not getting hot. The orange glow in the arrow ▲▼◀▶ area is not visible.</b>	Is the cord properly connected to the device?	Check if the cord is properly connected.
	The cord with pads may be broken.	Replace the cord with pads.
<b>The pads are too hot on the skin and there is a burning scent.</b>	The pad with gel may be broken or bent, or the cord with pads may be short-circuited.	Stop using the device immediately, and replace the gels and/or the cord with pads.
 <b>E1 is displayed.</b>	Is the cord properly connected to the device?	Check if the cord is properly connected. If the error is still displayed, the cord may be broken. Replace the cord with pads.

If this happens...	Possible causes...	Try this solution...
 <b>E2 is displayed.</b>	The cord with pads may be short-circuited.	Stop using the device immediately, and replace the cord with pads.
 <b>E3 is displayed.</b>	Device error.	The device may be broken. Stop using the device immediately.
 <b>E4 is displayed.</b>	The device is being used outside of the operating temperature.	Leave the device within the operating temperature +10 to +40 °C for a while before use.
<b>The operating time is short, or the device does not operate, even when the battery is fully charged.</b>	This may be due to the life of the rechargeable battery. However, the battery cannot be replaced. Please dispose of the device.	

## Technical Data

















Product Description	Electronic Nerve Stimulator
Model	HV-F311
Power Source	AC Adapter (INPUT 100-240 V, 50-60 Hz, 0.12-0.065 A) Lithium-ion battery built in (3.7 V; Approx. 1510 mAh)
Battery Life	Will last for approx. 500 full charges in normal temperatures of 23 °C
Frequency	Approx. 0.7 to 108 Hz
PULSE Duration	100 µsec
Maximum Output Voltage	70 V (during 500 Ω load)
Operation Mode	Continuous operation
Power Control	20 intensity levels
Operating Conditions (When using product)	+10 to +40 °C / 30 to 80 % RH (non-condensing) / 700 to 1060 hPa
Transportation and Storage Conditions (Between uses)	0 to +40 °C / 30 to 80 % RH (non-condensing) / 700 to 1060 hPa
Battery Charging Condition	+5 to +35 °C
Weight	Approx. 220 g
Outer Dimensions	Approx. 71 (W) × 165 (H) × 30.5 (D) mm
Package Contents	Main Unit, Cord with Pads, Pad Holder, Gels (2 pairs), Instruction Manual, AC Adapter, Warranty Card










Classifications	Internally powered (Operating), Class II (AC Adapter), Type BF (Applied part: Gels), Main Unit: IP22, Cord with pads: IPX1, AC adapter: IP22
Maximum Temperature of the Applied Part	+43 °C or less

**NOTE:**

- These specifications are subject to change without notice.
- Designed for a minimum of 5 years life expectancy except gels. Gels are valid for 3 years in the unopened state and can be used up to 30 times.  
Minimum life expectancy may vary depending on usage environment and product care/maintenance. Frequent use of the product may shorten the durable period.
- IP classification is degrees of protection provided by enclosures in accordance with IEC 60529. The main unit and AC adapter are protected against solid foreign objects of 12.5 mm diameter and greater such as a finger, and against oblique falling water drops which may cause issues during a normal operation. The cord with pads is protected against vertically falling water drops which may cause issues during a normal operation.
- Operation mode is classification in accordance with IEC 60601-1.
- This OMRON product is produced under the strict quality system of OMRON HEALTHCARE Co., Ltd., Japan.
- Please report to the manufacturer and the competent authority of the Member State in which you are established about any serious incident that has occurred in relation to this device.

## Technical Data

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)		Unique Device Identifier
IP XX	Ingress protection degree provided by IEC 60529		For indoor use only
	Serial number		Need for the user to consult the instructions for use
	Indication of connector polarity		Class II equipment
	CE Marking		Temperature limitation
	Humidity limitation		Atmospheric pressure limitation
	Direct current		Alternating current
	Medical Device		Date of manufacture

	RCM compliance mark, which indicates compliance with electrical safety, EMC, EME & telecommunications requirements in Australia, as applicable to the product.		Power on / off
			SMPS (Switch mode power supply unit)
	Efficiency level of power supply		Danger
	SMPS incorporating a short-circuit-proof safety isolating transformer (inherently or non-inherently)		Recycling mark
			Use-by-date
			LOT number
Product production date is printed on the device: the first 4 digits mean year of production, the next 2 digits mean month of production, the next 2 digits mean date of production.			

## Guidance and Manufacturer's Declaration

### Important Information Regarding Electromagnetic Compatibility (EMC)

HV-F311 conforms to EN60601-1-2:2015 Electromagnetic Compatibility (EMC) standard. Further documentation in accordance with this EMC standard is available at <https://www.omronhealthcare-ap.com/emc-information>. Refer to the EMC information for HV-F311 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 of, 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 product 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 return 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.







## Notes

<p><b>Manufacturer</b></p> 	<p><b>OMRON HEALTHCARE Co., Ltd.</b>  53, Kunotsubo, Terado-cho, Muko, KYOTO,  617-0002 JAPAN</p>		
<p><b>EU-representative</b></p> <table border="1" data-bbox="87 308 252 360"> <tr> <td data-bbox="87 308 168 360">EC</td> <td data-bbox="172 308 252 360">REP</td> </tr> </table>	EC	REP	<p><b>OMRON HEALTHCARE EUROPE B.V.</b>  Scorpius 33, 2132 LR Hoofddorp,  THE NETHERLANDS  <a href="http://www.omron-healthcare.com">www.omron-healthcare.com</a></p>
EC	REP		
<p><b>Importer in EU</b></p>			
<p><b>Asia Pacific HQ</b></p>	<p><b>OMRON HEALTHCARE SINGAPORE PTE LTD.</b>  <a href="http://www.omronhealthcare-ap.com">www.omronhealthcare-ap.com</a></p>		
<p><b>Production facility</b></p>	<p><b>OMRON DALIAN Co., Ltd.</b>  116600 Dalian, P.R. China</p>		

Made in China

CE 0197